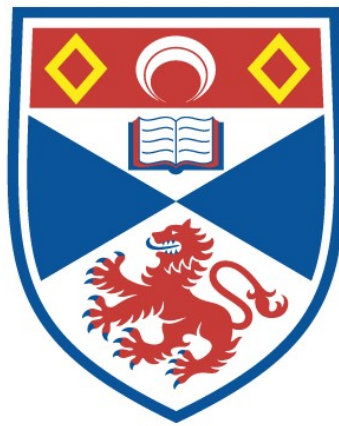


'PLACING VALUE'
REFRAMING CONCEPTIONS OF THE IMPORTANCE OF THE
COMMUNITY PARK

Alice Oldfield

A Thesis Submitted for the Degree of PhD
at the
University of St Andrews



2014

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'Placing Value'

Reframing conceptions of the importance of the
community park

Alice Oldfield

Submitted as an integral part of the PhD in Geography, University of St Andrews, October
2014

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Acknowledgments

I'd say the acknowledgements of any thesis are the most personal aspect. I expect many people look forward to writing them, not least, because the fact that they entirely represent opinion and pleasantries should make it fairly easy to do so. However, now that I am faced with the task I find myself enormously daunted by it for a few reasons. Firstly, on a practical note, there is a real risk that I'll forget someone which is something I absolutely do not want to do, but, stylistically, there is also a second concern that these paragraphs will turn into an interminable list of people, akin to a really poor awards speech, and thus become exceedingly boring to read. I'll endeavour to keep these fairly brief to ensure that isn't the case.

First of all, it is necessary for me to thank my supervisors Duncan MacLennan and Donald Houston for all the help and support that they have given me during my doctoral work. Duncan, it is almost certain that without your encouragement I would never have believed myself capable of this level of study and, although something I have struggled with at times, the agency that you have allowed me in the design and focus of my research has enabled me to take full ownership of my work and for that I am grateful. Donald, the quest to 'convince' you has markedly improved my research and I am really thankful for the innumerable helpful suggestions you have made throughout my PhD to help me to dig myself out of any practical issues.

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Thank you.

Abstract

In the UK, urban parks face a precarious future and, with projected cuts of over 65% to local authority discretionary funding (Local Government Association, 2012:2), it is ever more important to understand their value. This study interrogates the value of these resources from the perspective of the individual and, through a mixed method comparative case study of two community parks in Leeds, West Yorkshire, identifies four key challenges to existing framings of their significance.

Drawing on primary observational, social survey and interview data, boundaries constructed between forms of value are, firstly, problematized with fluidity recognised between use and non-use aspects. Secondly, a range of previously-omitted past-related values are identified. Negative elements of significance are, then, thirdly, highlighted as heavily interwoven with positive accounts of importance and emphasised as key omissions in prior representations of value. Before, finally, value is stressed as spatially relative, with comparison with other leisure resources noted as an inherent facet of accounts. Taken together, these challenges demarcate an individual perspective of value as notably distinct from those levelled at other scales, such as the firm or community, as it emphasised that, from this perspective, the value of a resource must be rethought as a relational property created in the interaction between people and their environment, rather than an absolute property assigned to a space.

Organisations, such as Nesta (Neal, 2013:21) have emphasised a need to ‘rethink’ the funding and management of urban parks, moving towards “mixed funding models”, incorporating some level of community voluntarism. This assumed involvement is, however, premised on community engagement which is far from certain. As such, there is a pressing need to understand the value attached to urban parks to understand the scope for expectations of voluntarism to be truly fulfilled.

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Chapter 1: Introduction

Public parks have been etched in UK culture since their heyday in the Victorian era. While initially provided to improve public health and serve as an impetus for civic pride, with increases in leisure time over the 20th century, the role of these public arenas diversified and their benefits for general wellbeing are now widely acknowledged. However, over the last fifty years, with increases in private transportation, advances in communications technology, the emergence of new leisure pursuits and the rise of the dual-earner household, household activity patterns have altered markedly and the value of local leisure resources for individuals has, thus, been called into question. Concerns regarding obesity in recent decades have further hinted at an evolution to more sedentary lifestyles and the significance of parks resources, which have traditionally been associated with sport and activity, can likewise be queried on these grounds.

Urban parks represent costly public resources and their position on the political agenda has varied to a great extent. The 1970s and 1980s were characterised by underinvestment in green space maintenance, leading many parks to fall into disrepair and visitor numbers to decline. However, the late 1990s and 2000s served as a renaissance for park delivery, supported by: the creation of the Urban Green Spaces Taskforce in 2001 which delivered its report 'Green Spaces, Better Places' in 2002; a series of funding programmes from the Heritage Lottery Fund and the Big Lottery, and the establishment of CABE space in 2003 as a sub-branch of the Commission for Architecture and the Built Environment (CABE). This thesis explores the significance of small-scale urban parks to individuals and, while policy does not serve as the focus of this research, the present policy context only adds to its timeliness, as recent policy developments have, once more, thrown the future of public parks into doubt with concerns that maintenance may once again be stepped back.

Since their inception in 2010, the Coalition government has been associated with two connected policy narratives, Localism and the Big Society, which advocate the decentralisation of power from the central state to smaller-scale actors such as local authorities and community groups. As the Minister for Decentralisation has highlighted, 'localism is the ethos; decentralisation is the process and the outcome is the Big Society' (House of Commons Communities & Local Government Committee, 2011:13) and since their underpinning with the

Localism Act in November 2011, these linked narratives, together with austerity measures, have had marked implications for the provision and maintenance of local green spaces.

In itself, the drive for devolution of power to smaller scales of governance and greater community control is not new, with roots in New Labour's Third Way of the 1990s but also stretching back further to the emphasis on community development by the Conservative government of the 1970s. A lack of clarity has however been highlighted as to the specifics of the Coalition government's agenda, with suggestions that it encapsulates both the transfer of power to local authorities and community groups, whilst failing to elucidate the tension between these entities and their potential interdependencies (MacLennan and O'Sullivan, 2013).

In green space provision, the impact of these policy drivers, together with public funding cuts, has been particularly acute, seeing CABE space incorporated into the Design Council in 2011 with the streamlining of central government, and local authority spending reductions impacting non-compulsory services severely. While the maintenance of park resources has traditionally been predominantly funded by local authorities, this can no longer be the case, as projections indicate cuts to discretionary funding of over 65% (Local Government Association, 2012:2).

Organisations such as Nesta have thus underscored an urgent need to "rethink" the nature and management of UK parks going into the future, advocating a move towards "mixed funding models" (Neal, 2013: 21). Here, there is a drive towards more North American models of park management where, instead of public investment, green spaces generate their own funds through corporate sponsorship, commercial opportunities and philanthropic endowments. It should, however, be noted, that many of these income generation strategies work best at a large scale and their usefulness for the funding of small scale parks can therefore be questioned. Nevertheless, underpinned by the rhetoric of the 'Big Society', these mixed models also draw on some level of community voluntarism, advocating the formation of community-led management organisations to assist with park maintenance and organisations such as the Big Lottery have funded programmes, including GreenSpace's Love Parks initiative, to facilitate this increased community involvement (Big Lottery Fund, 2013).

Community voluntarism has long been a part of park maintenance and funding, with around £30 million raised in the UK annually by approximately 5000 park friends and user groups (Heritage Lottery Fund, 2014:8). This however represents only a fraction of all park spaces and questions remain as to whether voluntarism can be increased sufficiently to offset reductions in local authority support. Reed and Selbee (2001) have highlighted voluntary involvement more generally as an activity predominantly undertaken by only a small subset of the population, termed the 'civic core', suggesting any form of community engagement will ultimately reach an upper limit. A recent report on 'The State of UK Parks' by the Heritage Lottery Fund warns against an overreliance on voluntarism, emphasising that while voluntary involvement has increased since 2010, this has gone hand-in-hand with a loss in supporting local authority knowledge, leading to deterioration in park quality.

The discussion of value offered in this thesis provides the opportunity to question the basis upon which individuals engage with their local parks and understand more fully the significance they attach to these spaces. The exploration of this diversity of importance allows for the expression of some scepticism surrounding both how well voluntarism can be operationalised at the local level and the extent to which expectations of voluntarism may truly be fulfilled. These implications are returned to in Chapter 8.

Existing conceptualisations of the value of urban parks largely derive from work carried out by public bodies such as CABI. In many instances these studies have focused on placing an economic valuation on the intangible benefits of resources and, where non-economic value has been addressed, this has mostly been explored from the perspective of firms or the community in general. While some studies have collected people's thoughts on their local parks (see, for instance, CABI space (2005a)), this research has been treated in isolation from value discussions and there is thus relatively limited understanding of the value (or importance) that individuals assign to their local park. The most complete exploration of this has occurred in a top-down fashion in landscape economics where academics have sought to decompose monetary valuations into their constituent elements. Thus, despite the clear connections that can be drawn between value and the geographical notion of 'place' attachment, emphasis has centred on functional, often user-centred, appreciations of importance, with more emotive elements of value being somewhat marginalised.

Within this body of work, resources under examination have also varied greatly. For the most part, however, research has focused on the built environment as a whole or public space

resources in general, exploring value in a broad sense. Yet, the transferability of insights between this level of generality to specific green spaces can be cast into doubt, with aspects such as exchange value noted as inapplicable to public park resources. Even where accounts of value have centred specifically on green spaces, many of these have been constructed on the basis of large-scale examples, rather than more everyday spaces, and both the functionality and significance of these arenas may vary considerably by scale. Thus, while authors such as Burgess, Harrison and Limb (1988) have emphasised everyday green spaces as some of most significant, these resources have to date received the scantest attention and understandings of their importance remain relatively incomplete.

The thorough interrogation of value offered by this study adds to this body of work in four key ways. Firstly, in contrast to existing work, here, a bottom-up individual perspective on the importance of a green space resource is explored. Secondly, by focusing on community parks, the comparative case study presented in this thesis, provides a detailed exploration of the importance of local scale resources to local residents, contributing to understandings of how the importance of everyday resources may differ from those provided at a larger-scale. Thirdly, the approach adopted in this research redresses the overemphasis on use and function in existing conceptions of value, employing mixed methods to explore both functional and meaning-laden aspects and, thus, enabling a fuller appreciation of how people engage with these spaces at the individual level. Finally, by exploring previously under-examined connections between value and the notion of 'place attachment', this study enables the importance of experience in understandings of value to come to the fore.

The remaining chapters of this thesis fall into three sections. In the first of these sections, **Chapter 2** evaluates existing research into the value of urban parks, unifying the divergent perspectives and distinct scales identified in this body of work and, thus, elucidating in more detail the impetus for this study. In the course of this, three key research questions are identified for specific exploration. Following this, **Chapter 3** outlines in detail the comparative case study approach adopted in this study, stressing the use of mixed methods as crucial to ensure consideration of the multiple facets of value, as the inherent qualitative and quantitative characteristics of different elements are emphasised. Throughout this chapter, methodological integration is emphasised as pivotal in mixed methods studies and attention is thus paid to the bases for integration in philosophical, data and analytical terms in this study.

The second section of this thesis identifies key flaws and omissions in existing understanding of the value of urban parks, consisting of three analytical chapters which explore in detail data collected. In **Chapter 4**, the dominance of direct use as a facet of value is questioned, as use is highlighted as associated with need rather than choice and negative perceptions are noted as important limitations on the use of case study spaces. Given the longstanding nature of park resources, **Chapter 5** explores the role of the past in understandings of their importance, identifying a range of both comparative and absolute values associated with this temporal horizon. Here, the significance brought to current conceptions of importance from experience as a child is stressed as a notable gap in prior understanding. In **Chapter 6**, in a departure from previous accounts of value, attention is paid explicitly to the connections drawn by participants between different forms of value. Here, a high degree of continuity is identified between temporal values and fluidity between use and non-use values noted, casting the meaningfulness of boundaries previously drawn between aspects of importance into doubt.

The implications of analytical insights drawn in this study are explored in the final section of this thesis. The discussion presented in **Chapter 7** emphasises the individual perspective on the value of urban parks as notably distinct from those levelled at other scales. Situating preceding insights in existing literature, it identifies four marked challenges to existing typologies, noting how theoretical framings of importance must be reformulated to take account of these elements. Here, the integral role of experience in accounts of value is underlined as it is stressed that the value of a park resource must be rethought as a relational rather than absolute property, constituted in the interplay between an individual and that setting.

Chapter 8 discusses the key conclusions of this study, addressing their implications in a broader sense. As publicly provided resources, the insights offered to the policy community are first explored, before understanding how this chimes with geographic discipline as a whole. With themes of the significance of experience and spatial relativity running throughout this volume, value is emphasised as an inherently geographical concept, connecting strongly to notions of 'place' and 'space'. Clear scope for further work in this area is thus identified, with attention to other forms of infrastructure and longitudinal explorations of significance delineated as potentially fruitful avenues for future research.

Chapter 2: Existing Conceptions of the Value of Urban Parks

2.1 Introduction

As highlighted in Chapter 1, urban parks, as part of public infrastructure, are facing an increasingly difficult economic climate and, with discretionary funding projected to decline by over 60%, local authorities are finding it ever more challenging to justify their outlay on the provision of these resources (Neal, 2013:8). There is therefore an increasing imperative to understand more fully their importance. Urban parks are widely regarded as valuable parts of local neighbourhoods. However, as highlighted in the following sections, prior accounts of their value have largely centred on benefits to firms or communities in general. Understanding of the value of urban parks at the micro scale of the individual, the focus of this study, is, however, much more limited. Nevertheless, with localist discourses advocating local people take on some degree of the management of their community environmental and social infrastructure, the need to understand the basis upon which individuals engage with these arenas is ever more acute.

Drawing on a diverse interdisciplinary body of work, this chapter interrogates available evidence on the value of urban parks. Firstly, in exploring existing research into both its economic and non-economic facets, the contribution of this study is made evident, as a paucity of work addressing individual perspectives on value is identified. A further knowledge gap is delineated in value discussions surrounding the importance of small-scale green spaces and the focus of this thesis on community parks is thus justified. Finally, prior urban green space research is noted as having been largely siloed by function, centring, for instance, on its health benefits or environmental roles. This chapter thus seeks to overcome many of these divides, making previously unexplored connections to the notion of 'place attachment' and synthesising these alternative bodies of work into existing value framings. These connections then form the basis for the elucidation of questions as to the accuracy of existing typologies of the value of urban parks when these are translated to the local scale.

2.2. Research attention to public green space

Public space has been identified as a 'key concept' in urban geography (Latham, McCormack, McNamara and McNeill, 2009). Nevertheless, as Byrne and Wolch (2009) have noted, somewhat surprisingly, these arenas have received relatively little attention from geographers. Instead, urban parks, and urban green space more broadly, have been a field of interest for disciplines as distinct as environmental economics (e.g. Choumert and Salanié, 2008; Tyrväinen, 1997); leisure science (e.g. Home, Hunzler and Bauer, 2012); environmental psychology (e.g. Ulrich, 1984) and urban design (e.g. Ward Thompson, Aspinall and Bell, 2010; Coolen and Meesters, 2012; CABI, 2001; CABI, 2006). While some in environmental economics and urban planning have examined the value of these resources as a whole, academics from cognate disciplines have more readily examined particular aspects of this importance, exploring for instance their health benefits in isolation. It has also been noted that these divergent literatures "rarely cite one another" and have often used contrasting terminology, data and questions, creating a kind of language barrier, inhibiting their integration (Irvine, Fuller, Devine-Wright, Tratalos, Payne, Warren, Lomas and Gaston, 2010:216). Knowledge has therefore not coalesced in this area. Sanesi, LaFortezza, Bonnes and Carrus (2006) have examined this disciplinary divergence, comparing two studies of urban green space conducted in Italy, one drawn from environmental psychology and the other from urban forestry. While both studies examined perceptions of and attitudes towards these arenas, researchers had very distinct ideas as to what these concepts meant, with urban foresters utilising more "functional" definitions of key terms and thus drawing notably distinct conclusions (Sanesi *et al.* 2006:128). The geographical perspective adopted in this thesis represents fertile ground for integrating these interdisciplinary insights into value.

2.3 Defining and exploring value

"Not everything that counts can be counted; and not everything that can be counted, counts."

(Sign in Albert Einstein's office, cited in Saxon, 2005:1)

In order to explore the value of urban parks, it is first necessary to define what is meant by 'value', and the above quote cuts to the heart of much debate around this concept. In his work in firms and local government, Miller (2008:1122) has emphasised that *"the word value seems to have become about as ubiquitous as email"* and widespread use, both in this arena and in

society more generally, has seen great plurality emerge in its common-sense meaning. As a result, it is possible to use the term in a contradictory manner, describing both the price of an entity and its aspects which are inherently priceless, and this variability is reflected in its three principal dictionary definitions which consider it: “the regard that something is held to deserve”, “importance or worth” and “material or monetary worth” (Concise Oxford English Dictionary, 2008). In some senses, this diversity is also reflected in previous work on this topic. However, where the notion of value has been explicitly addressed in relation to parks and green space, it has largely been in connection with the third of these facets, seeking to assign a monetary value to these public arenas. This study focuses more closely on exploring the second meaning of this term, examining the importance of urban parks to individuals, and, thus, makes no attempt to price resources. Economic and non-economic conceptions of value are not, however, diametrically opposed. As Pearce (1993: 13) has highlighted in relation to environmental goods more generally, economic valuations are underpinned by people’s understandings of non-economic value, with money representing a “measuring rod” for underlying preferences. It is therefore useful to synthesise insights from both approaches, understanding the economic view of value and the elements thought to constitute this, when looking to conceptualise non-economic value at the individual level. The techniques employed in this body of work, and aspects of value that are considered to underpin it are therefore discussed in more detail below.

2.3.1 Economic valuation of urban green space

As highlighted in both CABE (2006) and Saxon’s (2005) work on value in the built environment, for many aspects of the urban landscape, particularly commercial developments, economic value can be readily obtained, and included in decision-making processes, equalling the ‘asset value’ (or ‘exchange value’) of the resource; that is “the amount realisable by selling the asset or its income stream” (Saxon, 2005: 10). Limiting value to this entity is, however, problematic when considering urban parks, because here, land value (which could be considered exchange value) is nullified by legal protections which prohibit their exchange and development (Penning-Rowsell, 2006). Urban green spaces have therefore traditionally been rendered with little or no tangible asset value and park facilities have thus been dubbed “invisible assets” as these entities have traditionally been allocated a nominal asset value of only £1 on local government asset registers (CABE space, 2009:11). Evidently this valuation takes no account of

even the cost of reinstating such a resource and this historic undervaluing in asset terms is thought to have resulted in historic underinvestment in these spaces (CABE space, 2009).

The above approach to economic valuation deals with a very narrow conception of this value, taking no consideration of the benefits derived from these arenas. There has, however, been an upsurge in interest in public green space since the early 2000s as the benefits of green space provision have been increasingly recognised (Swanwick, Dunnett and Woolley, 2003) and publications, including CABE Space reports *Making the invisible visible: the real value of park assets* (2009) and *Does money grow on trees?* (2005), have made inroads into assessing the economic value of these spaces more completely. Two dominant research approaches have been employed to explore the economic value of urban green space in this fuller sense, with an aim to capture the amount that an individual is willing to pay for a change in an environmental resource (Pearce, 1993). These are revealed preference and stated preference techniques which are discussed in more detail below.

As parks are non-market goods, revealed preference techniques have sought to obtain the economic value of these spaces by examining the amount that people have paid in related markets (Hanley, Shogren and White, 2001). The two most common of these approaches are the 'travel-cost method' and 'hedonic pricing'. The 'travel-cost method' explores individuals' monetary outlay for travel to a resource (Hanley, Shogren and White, 1997). Travel costs incurred by visitors to small-scale parks, the subject of this study, are, however, often minimal and, as such, this method could be considered inherently biased to minimising the importance of neighbourhood-level green spaces. Hedonic pricing is more commonly employed (see for instance Kong, Yin and Nakagoshi (2007)). In essence, this technique works under the assumption that individuals express the value they attach to a park in their purchase of a house and thus looks to assess this added premium, controlling for other dwelling-level and neighbourhood-level characteristics (Hanley *et al.*, 2001). Although insights into non-economic value from environmental economics will be discussed in greater detail in section 2.3.2, it is worth noting here that, as highlighted in Table 2.1, both of the revealed preference methods discussed above only enable the measurement of a fraction of the overall importance of park resources. Stated preference techniques have thus emerged as alternative methods for quantifying preferences for urban green space.

Table 2.1: Values and economic methods for assessing urban green spaces
(Choumert and Salanié, 2008:336)

Values			Benefits	Assessment methodologies
Total Economic Value	Use values	Direct use value (Recreational benefits)	Recreational benefits	Market analysis, productivity loss, hedonic pricing, travel costs, replacement and restoration costs, contingent valuation
		Indirect use value (Benefits derived from the functions of green space)	Environmental benefits	Damage cost, production functions, hedonic pricing, relocation, replacement and restoration costs, contingent valuation
		Option value (the potential for future use)	Insurance for having the asset on stand-by	Contingent valuation
	Non-use values	Bequest value (Preservation for future generations)	Legacy benefits	Contingent valuation
		Existence value (The benefit of simply knowing it exists, irrespective of potential use)	Existence benefits	Contingent valuation
		Philanthropy value (The importance of the resource being there for others)	Philanthropic benefits	Contingent valuation

Contingent valuation is the most-used stated preference method and a raft of work has been published that has employed this technique in valuing urban parks specifically (e.g. del Saz Salazar and García Menéndez, 2007; del Saz Salazar and Rausell-Köster, 2008), other green spaces including urban forests (e.g. López-Mosquera and Sánchez, 2011; Tyrväinen, 2001; 1997; Tyrväinen and Väänänen, 1998) and open space more broadly (e.g. McConnell and Walls, 2005). As part of this technique, a value is obtained by presenting individuals with a hypothetical scenario and asking how much they would be willing to pay (or willing to accept) to preserve the existence of a resource (or compensate for its loss) (Hanley *et al.*, 2001). While both of these have been shown to be somewhat flawed as the value obtained through each differs markedly for the same resource, they do enable a monetary value for a park to be ascertained which incorporates some appreciation of the non-market benefits of this space (Horowitz and McConnell, 2002). Despite this improvement, within this method, it remains impossible to glean the relative importance of different aspects of value, and some have questioned the usefulness of obtaining a singular monetary value at all (Diamond and Hausman, 1994).

The idea of the relative importance is more readily incorporated in choice modelling, a second stated preference method which has emerged in green space valuation. Here, participants are asked to trade-off different attributes of a good (Hanley, Mourato and Wright, 2001).

However, this method has also been the subject of critique because, as Bullock (2008) has noted, there is great uncertainty as to how representative these trade-offs are of actual decision-making and whether individuals truly assign value to a park in a cumulative sense, attributing importance to individual aspects. Stated preference techniques also leave little scope for individuals to express aspects that they are unable or unwilling to trade-off (so-called 'non-compensatory preferences') (Lockwood 1999). As noted by Lockwood (1999), this issue poses particular practical problems in stated preference studies, in some cases, leading to incomplete datasets in choice modelling and 'protest zeros' in contingent valuation studies.

All of the approaches mentioned above point to the complexity of pricing and this has been acknowledged and explored in relation to other goods in other branches of economics, most notably behavioural economics (Poundstone, 2010). While a thorough examination of this body of work is outside of the scope of this review, theories developed here, such as 'anchoring and adjustment' (Tversky and Kahneman, 1974), highlight that the economic price assigned to a good is often contingent on the information provided or available to an individual. This relativity in pricing may also be relevant to non-economic valuation of urban green spaces. In his choice experiment in Dublin, Bullock (2008) highlighted, for instance, that familiarity (which could be considered indicative of the level of information an individual has about a resource) was key in the evaluation of importance. Existing work on the non-economic conception of value is examined in the section that follows. While not emphasised to date, this relativity is explored in greater detail in later chapters.

2.3.2 The non-economic conception of value

Although greater attention has been paid to the value of urban green space since the early 2000s, research into the non-economic value of urban parks has largely been nested in discussions about the importance of public space as a whole (Worpole and Knox, 2007; Holland, Clark, Katz, and Peace, 2007) or the value of design in the built environment (CABE, 2001; CABE, 2006) and a number of approaches to summarising and categorising this importance have emerged. Some have taken a functional focus emphasising the benefits provided by these spaces, and the urban realm more generally. The report "Your Parks",

published by the Urban Parks Forum in 2002 (Tibbatts, 2002) provides an example of this, identifying, for instance, the positive Environmental, Community, Educational, Recreational, Health and Economic contributions that these spaces make (a full list of benefits identified is provided in Table 2.2). A similar approach to this was adopted by CABI in their 2001 report into the value of urban design more broadly and, here, benefits were summarised according to the 3 pillars of sustainability: economy, society and environment (see Table 2.3). While this work has been useful in highlighting the multi-functionality of urban green spaces, there is scope to question whether value truly equates purely to benefit. For instance, where this term is considered synonymous with significance, logically negative elements should also feature.

While the “*value of urban design*” (CABI, 2001) report included a discussion of the negative impacts generated by design, these were presented in a table of significant costs, rather than being incorporated into the consideration of value. Nevertheless, the main issue raised by this work relates to great variability in the perspective of value addressed. Tibbatts’ (2002) report examines, for example, benefits in relation to communities and society in general, while others have focused on positive outcomes for local government (CABI, 2006), and discussions of urban design have often centred on beneficial effects on design firms and clients (Saxon, 2005; CABI, 2006). Emphases on both the definition of values and their measurement have diverged between these perspectives leading to a lack of consistency. In this context, the categorisation of aspects into economic, environmental and social benefits has been particularly problematic. The aforementioned report “*The value of urban design*” (CABI, 2001), written from a design firm perspective, provides a good example of this. Here, as noted in Table 2.3, house price increases are categorised as part of the social value of design. However, from the perspective of an individual or community, this would likely be classed as an economic benefit.

A second approach to non-economic value has examined it with a greater level of abstraction. This is most readily exemplified in the report ‘*the value handbook*’ produced by CABI in 2006. As summarised in Table 2.4, here 6 forms of value which could be attributed to aspects of the built environment were identified: exchange value, use value, image value, social value, environmental value and cultural value. In common with attention to the benefits of spaces, discussed above, questions can once again be raised as to the variability of value by perspective, as here, value is assessed from the perspective of the firm and society, with suggested measures including, for instance, public relations opportunities for ‘image value’

and press coverage for 'cultural value'. These elements appear to be of little relevance to an individuals' sense of value. More importantly, however, the abstraction proposed in this framework also raises questions as to the usefulness of assessing value in a general sense as the transferability of insights across the different built forms examined in the report is variable. For instance, while exchange value is relevant to buildings considered, as noted in section 2.3.1, legal protections mean this aspect of importance has limited application in the valuation of urban parks.

The transferability of notions of value between scales of resource also appears problematic. The urban park example employed in *'the value handbook'* report is Lister Park in Bradford, West Yorkshire which is used to provide an illustrative example of the social value derived from a well-designed built environment (CABE, 2006). However, this award winning large-park, together with its historic house, is likely to serve a markedly different role for individuals than more local-scale urban parks. A difference in the significance of larger and more everyday green spaces has long been noted (Burgess *et al.*, 1988; Bullock, 2008) and the extent to which forms of value attributed to large spaces translate to local parks with fewer facilities is thus debateable. While the above approaches usefully connect the concept of value and aspects of the built environment, this work has focused limited attention on small-scale spaces. This thesis addresses this knowledge gap directly by examining the non-economic value of local-scale community parks in detail. Existing research has also paid relatively little attention to an individual's perspective of the value of urban green spaces, the focus of this study, often employing a 'firm' or 'community' as the smallest scale of analysis and this therefore represents a further contribution to the field.

Table 2.2 – The Benefits of Parks and Greenspaces (Identified in ‘Your Parks’ Report (Tibbatts, 2002:3))	
The Urban Environment	
	Landscape
	Air Quality
	Air Cooling
	Flood Control
	Transport
Community	
	Community Cohesion
	Heritage
Ecology	
	People and Nature
Education	
	Curriculum
Play	
	Early Years
	Teenage Play
Sport and Recreation	
	A Mainstay of Sporting Activity
	Affordable and Accessible
	Grassroots
Healthier Lives	
	Stress Reduction
	Horticultural Therapy
	Obesity
Economy	
	Business Retention and Attraction
	Urban Regeneration/Neighbourhood Renewal
	Increase in Property Value
	Health
	Environment
	Tourism
	Events
	Industry and Employment Value

Table 2.3 – The Potential Value of Good Urban Design

(reproduced from “the value of urban design” (CABE, 2001:26))

	Economic	Social	Environmental
Financial Tangibles	<ul style="list-style-type: none"> - Potential for higher land values - Higher sale values & better re-sale values - Increased funding potential Higher rental returns - Increased asset value (on which to borrow) - Reduced running costs - Maintenance of value/income - Reduced maintenance costs (over life) - Easy maintenance if high quality materials - Reduced security expenditure - Reduced running costs (energy usage) - Reduced public expenditure (on health care/crime prevention/urban management and maintenance) - Increased economic viability for neighbouring uses/opportunities - Increased local tax revenue - Reduced travel costs 	<ul style="list-style-type: none"> - Regenerative potential (encouraging other development) - Better security and less crime - Less pollution (better health) - Higher property prices - Less stress (better health) - Reduced travel costs 	<ul style="list-style-type: none"> - Reduced energy consumption - Reduced resource/land consumption
Financial Intangibles	<ul style="list-style-type: none"> - Potential for greater security of investment depending on market - Quicker permissions (reduced cost, less uncertainty) - Distinctiveness (greater product differentiation) - Allows difficult sites to be tackled - Better developer reputation (increased confidence/'trademark' value) - Future collaborations more likely - Enhanced design professional reputation - Increased workload and repeat commissions from high quality, stable clients - Competitive investment edge - Higher quality longer terms tenants - Happier workforce (better recruiting and retention) - Better productivity - Increased business (client) confidence - Fewer disruptive moves - Increased occupier prestige - Increased city marketing potential 	<ul style="list-style-type: none"> - Reduced public/private discord (more time for positive planning) - Greater accessibility to other uses/facilities - Increased public support (less opposition) - Increased cultural vitality - Better quality of life - More inclusive public space - A more equitable and accessible environment - Greater civic pride (sense of community) - Reinforced sense of place 	<ul style="list-style-type: none"> - Less environmental damage - An ecologically diverse and supportive environment

Table 2.4 – The types of value (reproduced from ‘the value handbook’ (reproduced from “the value handbook” (CABE, 2006:10))		
Type of value	What does it mean?	How is it measured?
Exchange value	The building as a commodity to be traded, whose commercial value is measured by the price that the market is willing to pay. For the owner, this is the book value, for the developer the return on capital and profitability. Also covers issues such as ease of letting and disposability	Book value Return on capital Rental Yield
Use value	Contribution of a building to organisational outcomes: productivity, profitability, competitiveness and repeat business, and arises from a working environment that is safe in use, that promotes staff health, well-being and job satisfaction, that encourages flexible working, teamwork and communication, and enhances recruitment and retention while reducing absenteeism	Measures associated with occupancy, such as satisfaction, motivation, teamwork. Measures of productivity and profitability, such as healthcare recovery rates, retail footfall, educational exam results, occupant satisfaction
Image value	Contribution of the development to corporate identity, prestige, vision and reputation, demonstrating commitment to design excellence or innovation, to openness, or as part of a brand image	Public relations opportunities Brand awareness and prestige The recognition and ‘wow’ factors
Social value	Developments that make connections between people, creating or enhancing opportunities for positive social interaction, reinforcing social identity and civic pride, encouraging social inclusion and contributing towards to improved social health, prosperity, morale, goodwill, neighbourly behaviour, safety and security, while reducing vandalism and crime	Place making Sense of community, civic pride and neighbourly behaviour Reduced crime and vandalism
Environmental value	The added value arising from a concern for intergenerational equity, the protection of biodiversity and the precautionary principle in relation to consumption of finite resources and climate change. The principles include adaptability and/or flexibility, robustness and low maintenance, and the application of a whole life cost approach. The immediate benefits are to local health and pollution.	Environmental impact Whole-life value Ecological footprint
Cultural value	Culture makes us what we are. This is a measure of a development’s contribution to the rich tapestry of a town or city, how it relates to its location and context, and also to broader patterns of historical development and a sense of place. Cultural value may include consideration of highly intangible issues like symbolism, inspiration and aesthetics.	Critical opinions and reviews Professional press coverage Lay press coverage

2.4 An individual perspective on the value of urban parks

The majority of work at the individual level relevant to assessing the non-economic value of urban parks comes from attempts by environmental economists to decompose the monetary values they obtain for environmental resources. The most complete summary of these values for urban green space is provided by Choumert and Salanié in their 2008 paper. Here, they identify 6 forms of value thought to combine to underpin economic evaluations: direct use, indirect use, option, philanthropy, existence and bequest. These values are summarised in Table 2.1. An important inclusion made in this framework is the designation of non-use values in addition to the use values of 'direct use', 'indirect use' and 'option' value, although Choumert and Salanié (2008) are careful not to overemphasise the dominance of these non-use elements. Economists have recognised use aspects of value for several decades (see Pearce 1993 for instance). Non-use values of existence, bequest and philanthropy have, however, served as foci for much greater debate, having been aligned to philosophical debates around the anthropocentrism of value and the scope for altruism.

In Choumert and Salanie's (2008) summary of values, existence value is denoted as a park's inherent importance, particularly as a part of nature and, invariably this discussion of intrinsic significance is implicated in ethical discussions related to the construction of value. In discussions of value, distinction is commonly drawn between instrumental and intrinsic value and Curry (2006:42) suggests that "whatever has intrinsic value is *whatever is valued for its own sake*, without any reference to its usefulness in realising some other goal". While authors such as O'Neill (1992) have stressed some diversity in the use of this term, it is emphasised that people (and the instrumental, or functional, value of spaces) have been unduly privileged where the value of nature has been discussed. This argument has been extended to question that validity of valuation from a human perspective (anthropocentric valuation) with some have positing that this approach results in an impression that value is "anthropogenic", in that no value exists outside of that which people value (Curry, 2006). This, however, represents an overextension of this argument, as a large body of work has emerged to highlight the importance that nature has outside of human conceptions of it (Curry, 2006; O'Neill, 1992). Nevertheless, with the rise of rhetoric around sustainability, amongst other factors, the position of humans as a part of nature is more widely understood and thus, there is a need to include the intrinsic importance of nature even in anthropocentric conceptions of the value attributed to urban parks. It may nevertheless certainly be the case that specific forms of

nature, particularly animals and wildlife, may be privileged in these understandings of the inherent importance of nature. Lockwood (1999:389) emphasises the need to “disaggregate intrinsic value” suggesting “some people might accord intrinsic value only to individual mammals, others might include non-sentient creatures, plants or whole species”.

Altruism has been suggested as a further issue in the identification of non-use values. The consideration of others, inherent within these aspects of importance, has been noted as at odds with the traditional basis of economic valuation, utility maximisation. It has thus been posited that these values can only be included “within an economic framework on the assumption that the ultimate motivation is self-interest” and, here, a distinction between ‘selfless’ and ‘selfish’ altruism has been drawn (Crowards 1997:144). This becomes particularly noteworthy where the values of ‘philanthropy’ and ‘bequest’ are considered as these elements offer the greatest potential for self-serving altruism, with the significance of individuals represented as ‘others’ highly variable, ranging from members of general society to kin. The impact of this distinction in social ties on the prevalence of non-use values has generally been played down (Crowards, 1997). Logically, however, where these values are associated with family members and close friends, they can more readily be associated with selfish altruism. Furthermore, in these cases, non-use values may be more dominant as individuals will likely serve the interests of a group of which they are part, or that they have a genetic stake in, most readily. Authors such as Pearce (1993) have stressed the usefulness of familial relations in economic value assessments, noting their vital role in minimising intergenerational bias. However, there is a need to explore the qualitative scope of non-use values more thoroughly to understand how closely connected self-interest and non-use values truly are.

2.5 Connecting frameworks of value and importance

Urban parks, and public green space more broadly, play many different (intended and unintended) roles in an urban environment. Swanwick *et al.*, (2003) suggest that the aforementioned increased attention to green space provision has resulted from improving evidence as to these and authors have argued “an understanding of the multiple functions of urban green spaces is reasonably well developed” (James, Tzoulas, Adams, Barber, Box, Brueste, Elmqvist, Frith, Gordon, Greening, Handley, Haworth, Kazmierczak, Johnston, Korpela, Moretti, Niemela, Pauleit, Roe, Sadler and Ward Thompson, 2009:66). There is now a broad appreciation that public green spaces serve several roles within the modern city; and much of

the evidence base for the role that urban parks play in the urban environment is drawn from the literature on urban green space more broadly. However, despite this appreciation of their multi-functionality, as previously mentioned, these functions have largely been investigated in separation from each other, leading to some definitional inconsistencies. Many of the definitional inconsistencies related to green space stem from the term having a common-sense definition. In the broadest sense, green space can literally mean space which is green. This has led researchers to lack clarity when discussing the subject of their investigations as prior knowledge of the meaning of the term is sometimes assumed. There is, however, reason to question whether the common-sense and technical meanings of green space (and its associated terms) really coincide. As Swanwick *et al.* (2003) have noted, there are three areas in which researchers have been particularly unclear as to the definitions they are using: firstly, the terms 'open space' and 'green space' have been used interchangeably; secondly, urban green space has often been used as a synonym for public green space and, finally, a clear distinction between formal and informal green space has often not been drawn.

Despite the issues discussed above, insights drawn out of landscape economics can readily be aligned at the individual level with functional discussions and the other aspects of non-economic value noted in section 2.3.2. Table 2.5 explores these connections, using Choumert and Salanié's (2008) framework as a starting point, drawing connections with the summaries of benefits and more abstract values mentioned above. It is worth noting that Choumert and Salanié (2008) relate indirect use value solely to the environmental advantages provided by green spaces. However, logically, other forms of this value, related to economic and social factors, can also be identified and these are thus disentangled in the table. While Choumert and Salanié's (2008) framework can be seen as the most all-encompassing treatment of value at the individual level, Table 2.5 does suggest aspects of heritage may be a key omission. As Tibbatts (2002:8) has noted "parks are often [...] elements of continuity; staying substantially the same when all around the built urban scene can change rapidly" and hence this may represent a key aspect of their importance. Further attention is paid to this potential omission in the discussion of place attachment in section 2.6. The benefits discussed above have, nevertheless, been underpinned by relatively siloed bodies of work which are discussed in greater detail in the section that follows. It is worth noting, however, that in addition to the issue of the misalignment of insights, there has also been little consideration of how divergent values may be expressed by residents and users. In many of the aforementioned frameworks, for instance, the environmental benefits of green spaces are often presented as external to

people's use of these spaces using numerical figures. This benefit is, however, well known and thus may be expressed by individuals directly. Considering a park important because it allows you to 'get a breath of fresh air', may, for instance, in fact, be an acknowledgment of the environmental function that it serves in relation to pollution. Potential expressions of values are therefore also included in Table 2.5.

Table 2.5 – Alignment of different typologies of the value or importance of urban green space				
Values Thought To Underpin Total Economic Value (Choumert and Salanié, 2008:336)		Value Handbook Values Identified by CABE (2006)	The benefits of parks and green space (Tibbatts, 2002)	How values may be expressed at the individual level
Use values	Direct Use (Recreational benefits)	Use value Social Value	Community Cohesion People and Nature Education Sport and Recreation Stress Reduction Healthier Lives – Obesity	Restoration/Relaxation/Escape Contact with Nature Fresh Air Exercise/Sports Child Development/Education Social Interaction Volunteering
	Indirect Use (Benefits derived from the functions of green space)	Environmental Value	Landscape Air Quality Air Cooling Flood Control Transport (improved walkability) Ecology	Appearance Pollution Amelioration Biodiversity Urban temperature control Water control
		Cultural Value Image Value	Business Retention and Attraction Urban Regeneration Neighbourhood Renewal Increase in Property Value Health (savings) Environment (savings) Events Tourism Industry/Employment Value	House Prices Tourism Attraction Problem Mitigation
				Neighbourhood Reputation Prevention of Building Sense of Community
	Option (the potential for future use)			Right of Access
			Heritage	
Non-use values	Philanthropy (The importance of the resource being there for others)			For people without gardens For children and teenagers For families
	Existence (The benefit of simply knowing it exists, irrespective of potential use)			Intrinsic value
	Bequest (Preservation for future generations)			For future generations
			Cultural Heritage	

The divisions in urban green space research, noted above, have also led to certain functions being examined more readily than others, remaining relatively disconnected from discussions of overall value. In the wider body of green space research, direct use value has been portrayed as the most pivotal aspect of its importance, with research focusing on health outcomes and the potential of urban parks to aid community formation. In some cases, the focus of research appears to have largely been dictated by a desire for policy relevance, particularly where aspects of direct use are explored. It has been suggested, for instance, that the focus on health research have resulted from this aspect rising on political agendas (Schipperijn, Stigsdotter, Randrup and Troelsen, 2010), perhaps due to growing concern about the state of people's health in industrialised nations in the face of issues such as the obesity crisis. This body of health-related research is discussed in more detail below.

2.5.1 Direct Use and Health

Within the body of work that connects urban green spaces and health, three broad areas of interest have emerged, which relate to the contribution of these arenas to wellbeing and general health; levels of physical activity and mental health. These different aspects are discussed in turn in the sections that follow.

2.5.1.i Wellbeing and General Health

Research into the effects of green space provision on general wellbeing and health has been conducted for many years. However, there has been an evolution over time in the way that the perception of green space has been conceptualised which has had implications for this research. Initially, where connections to health were explored, the environment was considered primarily as a visual stimulus (Heft, 2010). Ulrich (1984), for example, in his well-cited study, suggested that a view of green space improved recovery times following surgery and this beneficial effect aligns most readily to indirect use in value discussions. However, following this, greater attention has been paid to the contribution to health of active participation in nature and this second body of work can be categorised as describing aspects of direct use value. Burgess *et al.* (1988:460), for example, examined these connections between wellbeing and park use in particular, noting that "urban residents have not been desensitized to the pleasures of the natural world". This suggestion has, however, since been brought into question by authors such as Hitchings (2010:857) who recently argued that city

workers in London were disinclined to use outdoor environments, having become accustomed to “only tightly controlled ambient conditions”.

Attention to the health contribution green space as an active arena has been supported by the emergence of a body of work in ecological psychology which employs affordance theory as its basis. Affordance theory was first discussed by Gibson in 1979 (Gibson, 1979:127 cited in Chemero, 2003:182) who noted “The *affordances* of the environment are what it *offers* the animal, what it *provides* or *furnishes*, either for good or ill”, and this has since been highlighted as a key contribution to understanding the perception of landscapes in a more active sense (Heft, 2010). As Heft (2010: 20) notes, “Although one can perceive affordances from a fixed vantage point, they are all about action. They indicate what one can do in some setting, and what activities may be ruled out”. While affordances are widely acknowledged as ‘relational’, they are not without debate and questions have been raised regarding to both their conceptualisation and perception (see Chemero (2003) for a greater detail on these) and, in an outdoor setting such as a park, seasonality is likely to have a significant impact on the affordances perceived.

Nevertheless, parks have been widely acknowledged as “family refuges” (Byrne and Wolch, 2009:743) and authors such as Tuan (1977) that childhood offers some of the most vivid sensory experiences. Thus, particular attention has been paid to the affordances that green spaces offer for children and teenagers in relation to play (see for instance Fjørtoft (2001); Kyttä (2004); Mäkinen and Tyrväinen (2008)). Drawing on the work of Barker and Wright (1955), connections have also been drawn here to discussions of meaning, with Heft (2010), for instance, emphasising this point with reference to open spaces and their use by children, stating “They do more than offer the possibility for running; they entice children to do so” (Heft, 2010:25). This combination of both affordance and meaning has recently been explored by Coolen and Meesters (2012) who identified notable differences in these between public and private green spaces.

These authors are not, however, the first to explore the divergence in meaning (and associated wellbeing) between types of green space. Burgess *et al.* (1988), for example, suggested that the satisfaction derived from the use of urban forests was limited by an uneasiness developed through their cultural depiction in media such as fairy tales. Fear of crime has also been emphasised as a further limiter to wellbeing. However, this is differentially important and its negative impacts have been highlighted as affecting particular social groups, such as women,

more markedly (Pain, 2000). Meanwhile, several studies have identified positive connections between public green spaces and a greater sense of wellbeing or general health. de Vries, Verheij, Groenewegen, and Spreeuwenberg (2003), for example, found that greener living environments in Holland were associated with a better level of self-reported health, a result confirmed by a study in Denmark (Stigsdotter, Ekholm, Schipperijn, Toftager, Kamper-Jørgensen and Randrup, 2010) and greener areas have also been associated with increased feelings of social safety (Maas, Spreeuwenberg, Van Winsum-Westra, Verheij, de Vries, and Groenewegen, 2009). Public green spaces are, however, noted as having a variable influence on different aspects of wellbeing. While they are shown to greatly improve social safety and mental health (Maas, Spreeuwenberg *et al.*, 2009) and authors have even suggested that access to green space can reduce health inequalities (Mitchell and Popham, 2008), others, such as Sugiyama, Leslie, Giles-Corti and Owen (2008), highlight that they have a much lesser impact on physical health.

2.5.1.ii The impact of green space on physical activity levels

In spite of a relatively limited evidence base connecting green space and physical health, a part of the direct use value of these arenas derives from them being seen as key spaces for recreation within local areas and it has been suggested that they serve an important role in encouraging physical activity. Research into the impact of the proximity of green space on physical exercise has, however, provided somewhat mixed evidence with a divergence in conclusions drawn from qualitative and quantitative work. McCormack, Rock, Toohey & Highnell (2010), for instance, provide a review of qualitative research in this area and, while they emphasise that poor park maintenance and perceived safety can lessen use, they do suggest a positive relationship between green space proximity and physical activity.

Quantitative work in this area from a range of countries has, however, demonstrated little association between these two factors. In a UK context, Hillsdon, Panter, Foster and Jones (2006) failed to find a relationship between access to urban green space and levels of physical activity amongst middle-aged adults. The age focus of this project does not, however, appear to connect with much of the present policy which pertains to associations between physical activity and obesity amongst young people. Research conducted in Australia has, however, supported these conclusions, with Giles-Corti and Donovan (2002) suggesting that access to a physical environment which is supportive of physical activity does not, by itself, lead to an

increase in activity. While they highlighted that it is an important precursor to increased activity levels, they also emphasised that it did not, by default, bring them about.

2.5.1.iii Contributions of public green space to mental health

Despite contradictions in relation to physical activity, more consistent results are evident in studies which have examined the implications of contact with nature on mental health, with stress relief and relaxation identified as key reasons for the use of green spaces in urban environments (Schipperijn, Stigsdotter *et al.*, 2010). The ability for green settings to serve a stress-relieving function is thought to distantly derive from an aspect of human evolution which garnered an innate appreciation for nature (Van den Berg, Hartig and Staats, 2007). Wilson termed this 'biophilia' in his 1984 work, 'The Biophilia Hypothesis'. Hitchings (2010) has, however, questioned this notion in relation to city workers, suggesting these individuals have become increasingly "socialised into indoor behaviours" which could not have occurred if such an evolutionary impetus truly existed (Hitchings, 2010:863). Nevertheless, urban green spaces have been termed "natural tranquilisers" and a raft of evidence suggests that these spaces serve a stress relieving function (Chiesura, 2004:130). Grahn and Stigsdotter (2003), for example, found a significant relationship between self-reported stress and the use of urban green spaces in their research in Sweden.

The restorative benefit of green spaces has also been examined in relation to attention and mental fatigue. Everyday life is thought to put great strain on an individual's information-processing capacities and activities such as communication and complex decision-making are said to lead to mental fatigue (Kuo and Sullivan, 2001a). Kuo (2001) examined the extent to which greener environments might relieve this fatigue, in the context of urban public housing in Chicago, Illinois; finding that even low doses of nature had an important influence on individuals' ability to cope. Kuo (2001) suggests that, within inner-city neighbourhoods, greener environments provide people with "the psychological resources needed to 'take arms against a sea of troubles'". Taking this further, Kuo and Sullivan (2001a) have linked this reduction in mental fatigue to the incidence of aggressive or violent behaviour in these neighbourhoods, suggesting that those living in greener environments report "fewer incivilities and less aggressive and violent behaviour" (Kuo and Sullivan, 2001a:343).

A further restorative function of urban green spaces relates to privacy. Hammitt (2002:19) defined privacy as the "voluntary and temporary withdrawal of a person from general society

through physical or psychological means” and suggested that this remains a necessity for humans in the modern world. This has some features in common with the above discussion of mental fatigue. However, here the importance of being able to escape from view is stressed. Hammitt (2002:21), in an examination of urban forest environments in Ohio, US found support for the suggestion that these spaces serve as “privacy refuges”; allowing individuals both space for quiet reflection and shelter from view. These functions are thought to have become increasingly important in modern urban life and this desire for privacy may call into question the interactional or community-forming role of green spaces. Social interaction has, however, been suggested as one of the key causal mechanisms for the link between access to green space and improved wellbeing (de Vries, 2010; Maas, van Dillen, Verheij and Groenewegen, 2009), and, as such, the different aspects are perhaps not as distinct as it might first appear.

2.5.2 Direct Use and Community

A key facet of direct use value is thought to come from social interaction and green space is thought to serve an important community-forming role in urban centres, promoting social inclusion and community formation more broadly (Department of Transport, Local Government and the Regions , 2002). This, together with the environmental functions (discussed in section 2.4.3), is seen as one of the key reasons for their initial provision during the Victorian era (Irvine *et al.*, 2010). During this period, public green space was considered the place to “see and be seen” and, as such, provided an important setting in which to come into contact with other individuals (Ward Thompson, 2002:63). The provision of urban green space as part of regeneration programmes also draws on this assumption as it is thought that these spaces can not only aid the physical renewal of a neighbourhood but also contribute to social renewal and the generation of social capital (Tibbatts, 2002).

Research into the role of urban green space as an interaction space has largely centred on the integration of divergent communities (Solecki and Welch, 1995; Gobster 1998) or the social inclusion of minority groups (Peters, Elans and Buijs, 2010). Solecki and Welch (1995), for instance, used indicators of tree condition to determine whether the provision of a park on a boundary between distinct communities helped to integrate these groups. They concluded from their investigation in Boston, US, that a number of parks acted to perpetuate social segregation and these were termed “green walls” as neither group took ownership of the space (Solecki and Welch, 1995:93). Gobster (1998:43), however, criticises their methodology, suggesting that there are better measurements of the “amenity value” than tree condition and

arguing, using these alternative measures that parks can in fact serve as “green magnets” aiding integration.

As previously mentioned, the role of green spaces in the integration of minority groups has also been examined. These spaces are thought to provide a key arena within which these people can interact with other population groups and, as such, can remedy social exclusion. Peters *et al.* (2010), for example, in their study in the Netherlands, examined whether social interaction in urban parks can help social inclusion of ethnic minority groups and found that this was indeed the case. They concluded despite interactions often being “informal and cursory” they remained important for social cohesion (Peters *et al.*, 2010:93). Despite a focus on adolescents from ethnic minority groups, Seeland, Dübendorfer, and Hansmann (2009) reached similar conclusions in their investigation of social inclusion in Zurich, stressing that these spaces provided an important arena for face-to-face communication between youths. Further research has connected social inclusion with access to green space with authors such as Germann-Chiari and Seeland (2004:3), for example, examining the extent to which green spaces are “optimally distributed” to encourage the inclusion of minority groups in three Swiss cities.

The focus on social inclusion of minority groups, discussed above, is, to some extent, understandable as these excluded groups, including ethnic minorities, adolescents and the elderly, are thought to spend more time within their local neighbourhood and thus may gain the most benefit from the use of public green space within the neighbourhood setting (Kazmierczak and James, 2007), and Byrne and Wolch (2009) have advocated that greater attention should be paid to race in future geographical attention to the use of urban parks. Hitchings (2010), however, notes the importance of examining not only those who use green spaces but also those that do not. This is an important point even where social inclusion remains the focus as, if spaces remain unused by large sectors of the population, they can only ever contribute to partial social inclusion. Little work has, however, been conducted on the importance of public green space for the wider adult community and this is where this project makes a further contribution. Kazmierczak and James (2007) detail a number of mechanisms through which green spaces can be seen to enhance community cohesion and social inclusion. These include their accessibility, their role as a focus for community involvement and their nature as an interactional space. These can also be seen as the ways in which public green

spaces can contribute to community formation more broadly and, as such, these are discussed in more detail below.

2.5.2.i Accessibility

A key feature highlighted by Kazmierczak and James (2007:356) is that public green spaces constitute “free and accessible public amenities”. These amenities are noted as being something of a rarity in modern society and it has been suggested that they provide an unusual example of “neutral ground” to which all groups of the population are, theoretically, equally entitled and equally able to access (Swanwick *et al.*, 2003:103; Dunnet, Swanwick and Woolley, 2002). These spaces are, however, not actually equally accessible. Distance has been stressed as an important limit to accessibility and it has been highlighted, for instance, that most green space users will not make regular use of spaces unless they are within 400 metres or a 5-minute-walk from their home as they travel to them on foot (Coles and Bussey, 2000; Ward Thompson, 2002). This could be seen as indicative of the importance of neighbourhood-level green spaces (such as those under examination in this project) in contrast to larger green areas. The importance of distance is also reflected in Del Saz Salazar and Garcia Menéndez’s (2007) contingent valuation study which noted that those living closer to a planned park were willing to pay a considerably larger amount for its provision than those residing further away. In contrast, Schipperijn, Ekholm, Stigsdotter, Toftager, Bentsen, Kamper-Jørgensen and Randrup (2010) provide evidence from Denmark to suggest that distance does not limit the use of green spaces for the majority of the Danish population. This majority, however, constituted only 66.9% of the population and the remaining 33.1% were found to comply with the distance relationship identified above.

Other factors such as concerns about mobility or crime have also been identified as barriers to accessing public green space (Dunnett *et al.*, 2002). Bjerke, Ostdahl, Thrane and Strumse (2006: 36-37) emphasised for instance that “locomotion abilities, strength and endurance often weaken as age increases” and, evidently, this can limit the ability of elderly individuals to access certain types of green space. Concerns around personal safety have also been shown to limit the perceived accessibility of green spaces and, by extension, restrict use. As Ward Thompson (2002:66) commented for many a park can function as “a place of fear and anxiety” with key triggers for concern including the density of vegetation and standards of maintenance (Bjerke *et al.*, 2006). Bjerke *et al.* (2006) found evidence to suggest that vegetation density was highly influential in people’s perceptions of safety. Their results suggested that open

vegetation was considered much less threatening than closed, and that this difference in perception was much greater amongst women. This is consistent with other studies which have suggested that fear of crime particularly affects women's use of green spaces (Pain, 2000). Maas, Spreeuwenberg *et al.* (2009), however, provide evidence that the presence of green spaces in a person's living environment can improve their feelings of safety, stressing that green spaces featuring dense vegetation were only associated with insecurity in the most urban areas. They did, however, note that this uneasiness may in fact relate to standards of park maintenance, highlighting that various forms of "disorder" such as graffiti and littering can undermine perceived safety (Maas, Spreeuwenberg *et al.*, 2009:1774).

2.5.2.ii Voluntary Involvement

A second way in which public green space is thought to encourage social inclusion is through its role as a focus for voluntary involvement (Department of Transport, Local Government and the Regions, 2002) and, as noted in Chapter 1, the recent political emphasis on 'the Big Society' has reinvigorated the connection of the voluntary ethos around park maintenance (see for instance the funding of GreenSpace's Love Parks project by the Big Lottery Fund in 2013 (Big Lottery Fund, 2013)). Kazmierczak and James (2007) note the potential for community stewardship of local green space to bring together disparate individuals within a community to work towards a common goal. This is also thought to be the case with local tree planting programmes which allow the community to take ownership of their local green areas (Dwyer, McPherson, Schroeder and Rowntree, 1992). Public green spaces are also thought to encourage community involvement through their role as a base for community groups and venue for local festivals. Activity groups such as crown green bowling clubs are often based in UK urban parks and the ability of individuals to participate in these groups is thought to encourage greater feelings of community. Organised festivals in green spaces are also suggested as key ways to improve the mixing of different community groups (McCormack *et al.*, 2010). However, these events are not ubiquitous and thus their overall effect may be somewhat limited. The potential for voluntary involvement varies greatly between green spaces. Dunnett *et al.* (2002) suggest that the potential for involvement not only depends on the nature of the green space under examination but also willingness of officials in charge of managing these spaces and capacity within the local community. This suggestion is supported by arguments that, while socially-excluded groups may be most likely to benefit from

community involvement, these individuals are less likely than others to participate, with volunteering in general concentrated amongst a 'civic core' (Reed and Selbee, 2001).

2.5.2.iii Social Interaction

The final way in which the use of public green space is thought to encourage community formation is through social interaction. There is an assumption that the development of neighbourhood social networks (and, by extension, social capital) is encouraged through interactions in public space (Bridge, 2002). The level of community within a neighbourhood is said to depend heavily on social ties between residents (Kuo, Sullivan, Coley and Brunson, 1998) and levels of social interaction have been shown to significantly predict sense of community within a neighbourhood (Kim and Kaplan, 2004). Neighbourhood common spaces are considered some of "the most important venues for casual social contact amongst neighbours" and it has therefore been posited that the social ties developed within them are a function of not only those interacting but also characteristics of these spaces (Kuo *et al.*, 1998; Kweon, Sullivan and Wiley, 1998). It has been suggested, for instance, that aesthetically attractive arenas encourage greater social interaction (Kuo *et al.*, 1998; Skjaeveland and Garling, 1997). Authors such as Coley, Kuo and Sullivan (1997) and Sullivan, Kuo and Depooter (2004) argued, for example, that the presence of natural landscaping, such as trees and grass, can lead to greater use of common spaces which, in turn, can promote more informal social contact between neighbours. Sugiyama *et al.* (2008) found further evidence of this, suggesting that local social interaction was more likely to occur in greener areas. In addition to more frequent use, it has also been argued that use of green areas is more prolonged than that of barren neighbourhood spaces (Kuo *et al.*, 1998), allowing the formation of stronger bonds with a larger number of individuals. While an investigation conducted by Kuo *et al.* (1998) found evidence of greater social interaction amongst those living adjacent to greener neighbourhood spaces, it should be noted that this study was conducted in inner-city urban public housing and, as such, it may not be possible to readily generalise these results. It is, however, important to emphasise that even the greenest areas under scrutiny were not all that green by other standards and, as such, one would expect at least some effect in greener environments.

The quality of local social interaction is also thought to be improved by the presence of green space. Coley *et al.* (1997:469) suggests that green spaces are "sociopetal" in that they encourage social interaction, although it is thought that this can be limited by poor design (Kazmierczak and James, 2007). Stress, aggression and violence are also thought to impoverish

the quality of social interaction and thus the stress-relieving function of green space is also thought to improve social interaction indirectly. As Kuo and Sullivan (2001b) demonstrated, green space has a large impact on aggression and violence through relief of mental fatigue and it is suggested that more fruitful social interactions result from this. The significance of this community-forming role has, however, been questioned. Burgess *et al.* (1988:462) commented 22 years ago that public green space was “extremely significant for social encounters” but, as highlighted in Chapter 1, lifestyles (and the associated social environment) have changed markedly over these two decades. While a recent study by Kazmierczak (2013), conducted in Greater Manchester, has suggested that local parks remain significant inner-city interactional areas, once again, given its focus on the inner-city, the generalizability of these findings can be called into question. Further questions can be raised as to the community-forming potential of these arenas where the diversity within the notion of ‘community’ is considered. This is explored in more detail below.

2.5.2.iv Questioning community

The basis for ‘community’ has commonly been considered residential spatial proximity, however, the concept has also been criticised for its “fuzziness” (Völker, Flap, Lindenberg, 2007:100). Its spatial extent has rarely been explicitly stated in past definitions, leading some to identify different spatial scales of ‘community’, ranging from “the whole town or city” to “the territory within which the inhabitants are considered neighbours” (Prezza, Amici, Roberti, Tedeschi, 2001:30-31). Nevertheless, the latter of these appears most common with community conceptualised as a “local entity” (Völker *et al.*, 2007:99) and connections drawn to traditional notions of ‘neighbourhood’, although the relationship between these two concepts has remained largely unspecified (Forrest, 2008). However, the changes in urban lifestyles discussed in chapter 1, coupled with changes in technology, have led to a number of alternate conceptions of ‘community’, most notably ‘virtual community’.

Virtual community, derived from ‘online’ or ‘virtual’ interaction, does not retain the need for spatial propinquity as they are founded on shared interests rather than shared space (Warde, Tampubolon and Savage, 2005). There has been some debate as to whether these virtual entities can truly be considered communities when individuals “never see, smell or hear each other” (Wellman, 2001:2032) and, authors such as Doheny-Farina (1996:37, quoted in Crang, 2000:306) have emphasised that “you can’t subscribe to a community as you can a discussion group on the internet”. However, Crow and Allan (1994:3) have stressed that “basically

‘community’ refers to people having something in common” and, if this is the case, then it seems entirely valid to consider virtual interactions capable of generating ‘community’. Evidently, there are, however, many different forms of virtual interaction in which individuals have more or less in common and this, by extension, can be considered to generate weaker or stronger versions of community. It should be noted, for example, that not all virtual communities are without a geographical root and while some online communities are founded solely on shared interests, this is not the case for all of them (DiMaggio, Hargittai, Neuman, and Robinson, 2001:317).

Debate has developed around the scope for new forms of community to replace local social interaction and, despite the emphasis placed in sociological theory on the importance of “weak ties”; that is, more casual interactions with acquaintances in the neighbourhood (Granovetter, 1973), authors such as Forrest and Kearns (2001:2126) have suggested that “a new virtuality in social networks and a greater fluidity and superficiality of social contact are further eroding the residual bonds of spatial proximity and kinship”. Alternative forms of communication do not, however, automatically lead to the substitution of earlier forms and evidence on this point appears to be mixed. Katz, Rice and Aspden’s (2001) study, examining the social impacts of the Internet in the US between 1995 and 2000, for example, found evidence of some level of replacement. This work suggested that Internet users were more likely to meet regularly with friends, were more likely to be away from home as part of their social life and knew fewer neighbours (Katz *et al.*, 2001). Others have, however, found evidence to the contrary and authors such as Graham (1998; 2002) and DiMaggio *et al.* (2001) have stressed that online communication, and the communities derived from it, can in fact complement traditional communities and help to sustain neighbourhood networks. This complementarity has, nevertheless, been noted to vary by social group, with women more likely than men to “employ the medium as a complement to other channels of social interaction (DiMaggio *et al.*, 2001:317).

In spite of this, discussions abound about a decline in community in western societies and, while, authors such as Crow and Allan (1994:3) have noted that these discussions have “a very long history”, the rise of alternative forms of community has reignited this debate. It is, however, difficult to speak of a decline in community unless it is conceptualised as a local entity (as with traditional residential community) and, where the alternative forms of ‘community’ are taken into account, it may instead be more appropriate to discuss a change in

the scale of 'community' rather than its loss. Nevertheless, even a change in the scale of community may have had a marked impact on the importance and use of local facilities. Even in the mid-1980s, authors suggested that the passive roles of green spaces were more important than their social functions (Bradley and Millward, 1986) and, given the social trends discussed above, this study's focus on the value of these spaces for local people appears very timely.

If public green space no longer retains an important interactional role for residents then this raises questions regarding the ability of individuals to substitute their use with that of other green spaces, most notably private gardens. Barbosa, Tratalos, Armsworth, Davies, Fuller, Johnson and Gaston (2007) suggest that social substitution can only ever be partial as private and public green spaces serve distinct social roles in that interactions in gardens are associated with private social networks. Evidently, however, if interactions with neighbours are becoming less dominant, then this substitution may become more complete. Ward Thompson (2002:66) has suggested that public parks serve as an arena for "the meeting of strangers", however, recent research has thrown this into doubt, noting that people use these spaces only to meet those that they already know (Peters *et al.*, 2010). Where this is the case, then the scope for substitution of social activity in public green space with that in private gardens is relatively high. This is not to say that a private garden can fully substitute all roles of a public park. As noted above, Coolen and Meesters (2012) have, for instance, emphasised a divergence in their affordances and meanings. Furthermore, even where the same benefit derives from a public and private setting, there can be subtle variations in its nature. Hammitt (2002), for example, stated that the form of privacy gained from the use of a public forest is fundamentally different to that obtained from spending time in one's own garden. This substitution nevertheless has the potential to represent a limit to the direct-use value of urban parks.

2.5.3 Indirect Use and Positive Environmental Outcomes

Choumert and Salanié's (2008) framework of value identified the 'indirect use' value as the benefit derived from the environmental functions of an urban park. However, urban parks have many beneficial economic functions in addition to their environmental contributions which can also be associated with this form of value and are discussed in more detail in section 2.5.4. Nevertheless, the environmental benefits of urban green space are very varied and well understood. It has been noted, for instance, that these functions prompted their initial provision in the 19th century. The key reason for provision was to aid the amelioration of urban

pollution, specifically air pollution (Swanwick *et al.*, 2003). This was particularly emphasised in the Garden City movement, the founders of which viewed public parks as “a green and pleasant heaven to replace an ugly and unhealthy urban hell” (Meacham, 1999:1). More recently, green space has also been highlighted as important in reducing noise pollution. Dwyer *et al.* (1992), for example, emphasised, in relation to urban forests, that the planting of trees and shrubs can significantly lessen this form of pollution. These authors also highlighted the benefits of urban forestry for urban hydrology and temperature control, noting that urban forestry in particular had the potential to reduce storm water flows and, as a result, ameliorate urban flooding (Dwyer *et al.*, 1992). Bowler, Buyung-Ali, Knight and Pullin (2010) have made a more thorough assessment of the effects of urban green space on urban temperatures. While broadly supportive of the suggestion that green spaces facilitate urban cooling; these authors noted that results become more mixed when specific aspects of urban greening were examined in more depth. Evidently, it is important to know the effects of these different aspects in order to ensure that policy interventions are both effective and cost-effective and, as such, more work is clearly required in this field.

The aesthetic contribution of green spaces in urban environments is high and numerous studies state that individuals prefer greener urban centres (James *et al.*, 2009). Green spaces are seen to break up the urban landscape and this is often cited as a reason for their importance (Choumert and Salanié, 2008; Chiesura, 2004; Bradley and Millward, 1986). In recent years, authors have examined the importance of certain aspects of this aesthetic role, looking to gain an understanding of those forms of green space which contribute most to visual amenity. Chen, Adimo and Bao (2009:80), for example, examined the aesthetic quality of Hangzhou Flower Garden in China, noting that there were various aspects to the aesthetic contribution of green spaces including “auditory, olfactory, tactile and visual elements”. Results suggested however that aesthetic quality did not vary significantly by age or gender as might be expected. The attractiveness of green space has nevertheless also been shown to impact residents’ evaluations of their neighbourhood more broadly and a study by Hur, Nasar and Chun (2009), conducted in Ohio, US, emphasised this by examining the effects of the openness and naturalness of neighbourhood environment on this neighbourhood satisfaction.

While the studies detailed above utilised different methodologies, all lend themselves to the examination of formal green spaces. Informal green spaces, such as grass verges can, however, improve the appearance or visual amenity of urban environments markedly. Despite Hur *et al.*

(2009) utilising GIS software to examine neighbourhood vegetation more broadly, many areas of informal green space are relatively small and can, therefore, easily be missed in classifications such as theirs which are drawn from aerial photography. It seems clear that further research as to the importance of these spaces might be beneficial in order to ascertain the extent to which these areas complement formal green spaces provided to serve particular functions.

The final aspect of green space environmental function addressed in the literature is its contribution to biodiversity and conservation. While the intricacies of this contribution will not be discussed here, it should be noted that these spaces are key habitats to many species. Chiesura (2004) suggests that urban green spaces have been relatively overlooked in considerations of biodiversity and conservation. However, growing concern regarding urban sustainability has prompted examinations of the contribution of these local green spaces; these include, amongst others, Goddard, Dougill and Benton (2010). Benedict and McMahon (2002:12) have also examined this function of green space under the heading of 'green infrastructure', suggesting that it serves as a "natural life support system" in cities. While these aspects can clearly be associated with indirect use value, the scope to connect this discussion, particularly of biodiversity, to existence value should not be overlooked.

2.5.4 Indirect Use and the Economy

In addition to the environmental functions discussed above, public green spaces have also been shown to provide a range of both direct and indirect economic benefits which can be considered part of indirect use value. The key direct economic benefits identified relate to employment and charging for use. Clearly, as public facilities in need of maintenance, the provision of green spaces provides employment for a number of individuals (Chiesura, 2004). In some cases, revenue is also generated directly through charging for use. Choumert and Salanié (2008) consider urban green spaces 'local public goods' as they are, at least at a local scale, largely non-excludable and non-rival, meaning that they are freely accessible and use of the resource by one individual does not significantly limit the use of it by another user. The implementation of charging is, however, associated with the exclusion of some groups which would compromise this status. While entry fees are not commonplace in the UK context, the incidence of charging for sports facilities, such as bowling greens, is much more prevalent and, on this basis, questions can be raised as to how 'public' public parks truly are, given these limits in accessibility.

The indirect economic effects of urban parks are numerous. A widely discussed benefit is improvements in house prices, drawn on in hedonic pricing methodologies discussed in section 2.3.1. As Dwyer *et al.* (1992:230) comment house prices reflect “the benefits that buyers attach to the attributes of that property” and these attributes include not only aspects of the house itself but also those of the wider neighbourhood including green spaces. The impacts of green space on house prices have been examined by a number of studies (Choumert and Salanié, 2008). Lutzenhiser and Netusil (2001), for example, clearly demonstrated this economic impact in their study in Portland, Oregon where they found that the presence of green spaces increased sale prices markedly. Green spaces also have implications for neighbourhood reputation with both positive and negative economic implications. Tourism is highlighted as a key positive contribution. Park facilities can serve to attract tourists into an area and by extension stimulate the local economy (Chiesura, 2004). It should be noted, however, that a poorly managed green space can also have the opposite effect, deterring individuals from visiting an area or purchasing a home there, although there is little scope to incorporate this limitation in the value framings discussed in section 2.3.2.

A further economic benefit derives from the functions of green spaces due to the economic savings that can accrue. As previously mentioned, environmentally, urban green space has been shown to contribute to pollution, flooding and temperature amelioration. As such, it has been suggested that green spaces make large indirect economic contributions by reducing the amount of money that is required to address these urban problems (Chiesura, 2004). The same can be said in relation to social benefits, particularly in relation to health savings in the UK context. Many health problems are more effectively and efficiently addressed through population measures, rather than individual measures such as medication. One such example is stress which has been linked to several illnesses, many of which relate to mental health. Illnesses such as these cost the UK government £75 billion per year and it is thought that the correct provision of green spaces could go some way to relieving such mental illnesses and by extension reduce this bill (Bird, 2010:xx). As Bird (2010:xix) emphasises “medicine has little to offer chronic stress” but landscape measures are thought to have a key role in its relief.

The above discussion of direct use and indirect use values places great emphasis on the functional contributions of urban parks, however, as previously mentioned, a key facet of the importance of these spaces may well constitute more emotive elements. Coolen and Meesters (2012) for instance noted this by considering both affordance and meaning in their exploration

of the substitutability of public and private green spaces and explicit connections have been drawn between studies of affordance and aspects of place, with Mäkinen and Tyrväinen (2008), for example, explicitly situating their discussion of teenagers' values of urban woodland in Finland in relation to place. Connections have not, however, been drawn between place attachment and the frameworks of value mentioned above. These connections are made below, highlighting two key areas where value framings may be lacking; in the incorporation of negative meanings and the appreciation of time.

2.6 Meaning and Value – drawing connections to 'place'

Since the late 1970s, the importance of locality to individuals has been examined through the concept of 'place', with this term situated by authors such as Tuan (1977:3) in relation to 'space' as follows: "place is security; space is freedom: we are attached to one and long for the other". Given concerns as to the impacts of globalisation, interest in this notion has grown rapidly in recent decades and a large body of theoretical and empirical work has been developed, utilising a variety of quantitative and qualitative methods (Lewicka, 2011). This literature has derived from a range of disciplinary backgrounds and a variety of terms have thus emerged. While geographers have discussed on the notion of 'sense of place' (e.g. Massey, 1991; 1994), environmental psychologists have investigated 'place attachment' (e.g. Hidalgo and Hernández, 2001; Lewicka, 2010;2011) and studies in sociology have focused more readily on 'community attachment' (e.g. Brehm, 2007). Other concepts such as 'place dependence' and 'place identity' have also abounded (Hidalgo and Hernández, 2001) and the definitional difference between terms has at times been unclear, with all focusing on "the attachment or emotional bond that people have with place" (Brown and Raymond, 2007:90). In other instances, however, greater conceptual division has been noted. Place dependence and place identity have, for example, been discussed as constituent elements of place attachment with Brown and Raymond (2007) delineating 'place dependence' as attachment to the functional elements of a locale and 'place identity' as the emotional meanings associated with that arena, a division which chimes well with the discussion of affordance and meaning mentioned above. Similarities can also be drawn here between the definition of these two elements and the use/non-use division in value noted by Choumert and Salanié (2008).

2.6.1 Negative meanings and the built environment

Locality has been a key focus in 'place' research and the majority of research has centred on attachment to the neighbourhood. Because of this, it has been suggested that an implicit assumption has been made that this scale represents that at which the greatest level of attachment occurs (Hidalgo and Hernández, 2001, Lewicka, 2010). However, authors, such as Hidalgo and Hernández (2001) and Lewicka (2010), have challenged this, examining connections at alternative levels, including the home and the city. Nevertheless, the majority of work remains based at the neighbourhood scale and a "selective nostalgia" permeates much of the discussion of neighbourhood (Forrest, 2008:129). There has thus been a focus in the 'place attachment' and 'sense of place' literatures on the positive connections to localities, which has been highlighted more recently as problematic. Affective bonds to localities, and the effects of these, are not solely beneficial or positive in character and a need to understand less favourable emotive connections has therefore been emphasised. Negative meanings have been raised, for instance, in discussions of attachment to the home, where accounts of this arena have been gathered from individuals such as victims of domestic abuse (Mallet, 2004) and there is scope to question how negative experiences may impact meanings attributed at different scales of analysis.

As noted briefly in section 2.5, existing typologies of the value of urban parks leave little scope for the consideration of negativity. However, given the discussion of place above, where an understanding of obtaining the significance of these spaces is the goal, negative aspects will almost invariably feature. Elements of the physical environment have already been highlighted as key triggers for fear of crime, with connections drawn to both the physical character of a space and its maintenance (Pain, 2000). Natural environments have been highlighted as provoking a particularly high fear of attack, especially amongst women (Pain, 2000) and, while these negative perceptions have been shown to vary markedly with the level of light in a space, they may nevertheless feature heavily in the assigning of direct use value to these local arenas. Vegetation density has also been noted as influential in determining perceived threat (Bjerke et al; 2006) with various forms of "disorder", such as graffiti and littering, further undermining the perceived safety of these arenas (Maas, Spreeuwenberg *et al.*, 2009:1774) and representing further potential limits to direct use value. The influence of this negativity may, however, be more wide-ranging as perceptions of threat can also have important implications for aspects such as neighbourhood reputation, relating to indirect use value.

Questions can therefore be raised as to whether negative elements of value should be made more explicit in framings of the importance of urban parks.

2.6.2 The importance of the natural environment and time

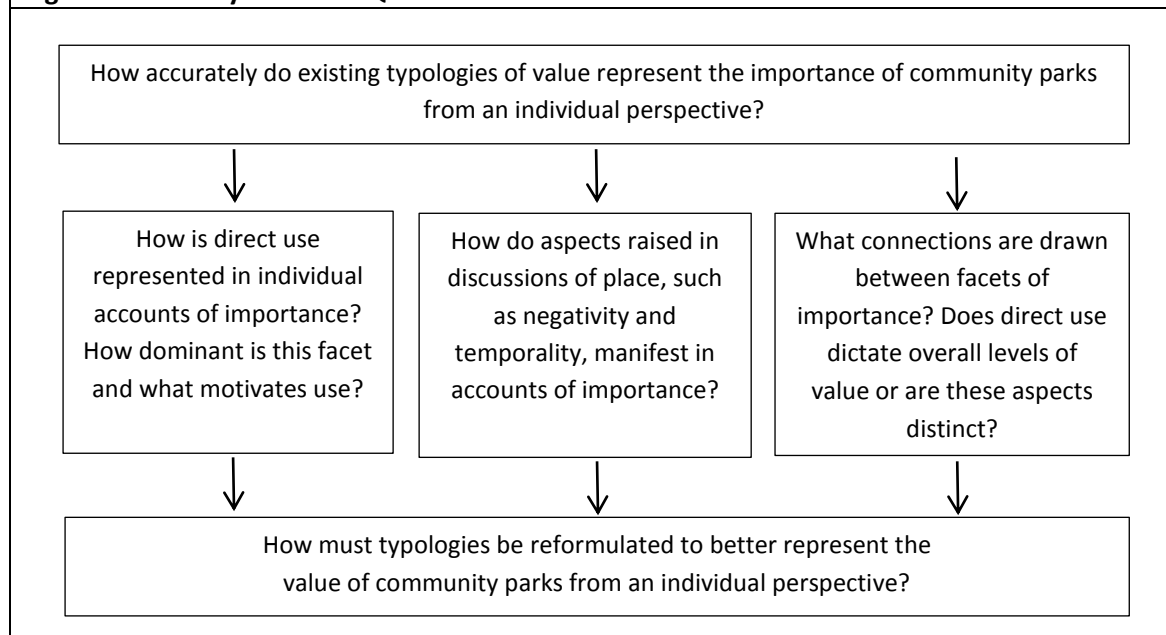
On examination of discussions of 'place, a final area of potential omission in value framings relates to the inclusion of time. Discussions of 'place attachment' have commonly emphasised that an emotive bond develops over time and those who have resided in an area longest have been found to have the strongest emotional bonds (Smaldone, 2006). As such, the past has become a key consideration in this area of research. Recent attempts to streamline definitions of 'place attachment' have further emphasised this point and authors such as Scannell and Gifford (2010: 2) have, for instance, developed a framework of place attachment which explicitly included elements of "memory" and "experience". Choumert and Salanie's (2008) framework of value however takes no account of this temporal aspect. While the identification of option and bequest values (see Table 2.1) clearly acknowledges a consideration of the future, no scope is provided to include the potential value attached to a space because individuals either associate it with or have used it in the past. In spite of this, aspects of users' pasts have been recognised as significant influences on their current use of urban green space and a "childhood factor" has, for instance, been identified, with those who have used public green space regularly in their childhood significantly more likely to make regular use of this type of resource in their adult years (Ward Thompson, Aspinall and Montarzino, 2008:111).

The past may however also be an important consideration even in the absence of current use. Where prior users have experienced lifestyle changes or developed mobility issues, for instance, use may no longer be possible but this does not inevitably negate the past-related significance of a space. A form of 'recollection' value may, for example, derive from memories of having used this arena in the past. Positive memories of other forms of green space may even lead individuals to attach greater importance to their local park. Rishbeth and Finney (2006) stressed this for migrants to the UK, emphasising that for this group, in some instances, green spaces that initially seem very different from those of their home country can serve as stimuli for memories of their previous lives, forming "the starting point for stories, small vignettes about home life, family outings, relaxation or leisure activities" (Rishbeth and Finney, 2006:287). Connections can also be drawn here to Rowles' (1983:299) work on place attachment amongst older people in US rural communities experiencing decline. Here, memory was identified as a key part of attachment for elderly people and, through a

discussion of “autobiographical insideness”, it was noted that, for any individual, any part of the neighbourhood represented both its current state and a series of remembered states, often from their childhood. Identifying this as a particular feature amongst those aged over 75, Rowles (1983:304) also stressed that physical proximity to a place was not always required to trigger this response as participants used their imaginations to situate themselves in their neighbourhood in a process he termed “reflective fantasy”. Nostalgia was, however, also identified as a key facet of autobiographical insideness, suggesting that participants always considered their memories as preferable to their existing place (Rowles, 1983). While authors such as Lowenthal (1985:xvi) have highlighted an inevitable comparison in accounts of the past, noting that “the past’s difference is, indeed, one of its charms[...] But we cannot help but view and celebrate it through present-day lenses”, questions can nevertheless be raised as to Rowles’ (1983) emphasis on nostalgia which may well have resulted from his focus on communities in decline rather than constituting an inherent feature of reflection.

2.7 Conclusion

This chapter has presented an overview of existing research into the value of urban green space, highlighting a dearth of evidence exploring the non-economic importance of these resources from the perspective of individuals. Drawing attention to definitional diversity and the interdisciplinarity inherent in discussions of value, accounts of non-economic worth were noted as varied, constituting both summaries of the benefits of spaces and broader, more abstract understandings of importance, and a relative lack of work addressing the importance of local-scale resources was also identified. The two knowledge gaps form the basis for this study. In the above discussion, drawing on landscape economics, Choumert and Salanié’s (2008) framework of urban park values, was identified as the most complete starting point for this examination and, in Table 2.5, connections were drawn between this typology and other framings of importance. This synthesis, together with synergies drawn to the notion of ‘place’, as an alternative conception of meaning in the built environment, raises a number of key questions which must be answered if the accuracy of existing typologies in depicting the value of community parks from an individual perspective is to be understood. These are presented in Figure 2.1.

Figure 2.1 – Study Research Questions

Firstly, there is an apparent need to understand the dominance of direct use value in accounts of importance. As emphasised in section 2.5, attention to the beneficial effects of the use of urban parks, in terms of, for instance, their contribution to health and community has been prevalent. However, the potential implications of trends in community on the patronisation of neighbourhood-level resources (discussed in section 2.5.2.iv) throw this use and its drivers into doubt and this thus requires further interrogation. Connections drawn to the notion of ‘place’ in section 2.6 offer a second avenue for exploration, with aspects of negativity and temporality highlighted as key potential omissions in considerations of value. A final question can also be posed which examines connections between aspects of value, which have been omitted from consideration to date. In existing discussions, use values, particularly direct use, have been depicted as the most pivotal facets of the importance of urban parks (see section 2.4), with user surveys and visitor numbers used as indicators of the significance of spaces. There is, however, little evidence of the how use may connect to perceptions of importance and parks that attract fewer visitors may not inevitably be less valued. The following chapter discusses in detail the methods and techniques employed in examining these questions, before analytical insights derived from their investigation are presented in Chapters 4-6. As highlighted in Figure 2.1, on the basis of this analysis, a further question emerges, concentrating of how typologies of value must be reformulated to take account of lessons gleaned. This final issue is returned to in Chapter 7.

Chapter 3: Investigating the Value of a Community Park

3.1 Introduction

This chapter details the research approach adopted in this thesis, discussing the use of mixed methods within a comparative case study design. As highlighted in Table 2.5, the notion of value is multifaceted and distinct types of importance lend themselves to different forms of measurement. While information on the direct use of an urban park can be gleaned from observation and social survey methods, data on perception and meaning, which is required to understand the indirect use, option and non-use values of a resource, are not readily obtained through these techniques. As Burgess et al. (1988:456) have noted, social survey methods are “an inadequate mechanism for revealing emotions and values”. Although semantic-differential and Likert scales are commonly employed as part of questionnaires to examine general attitudes towards green space (see Balram and Dragičević (2005) for an example), qualitative methods are required to access information as to the deeper importance that people attach. The non-economic value of community parks as a whole from an individual perspective thus cannot be explored through quantitative or qualitative means alone.

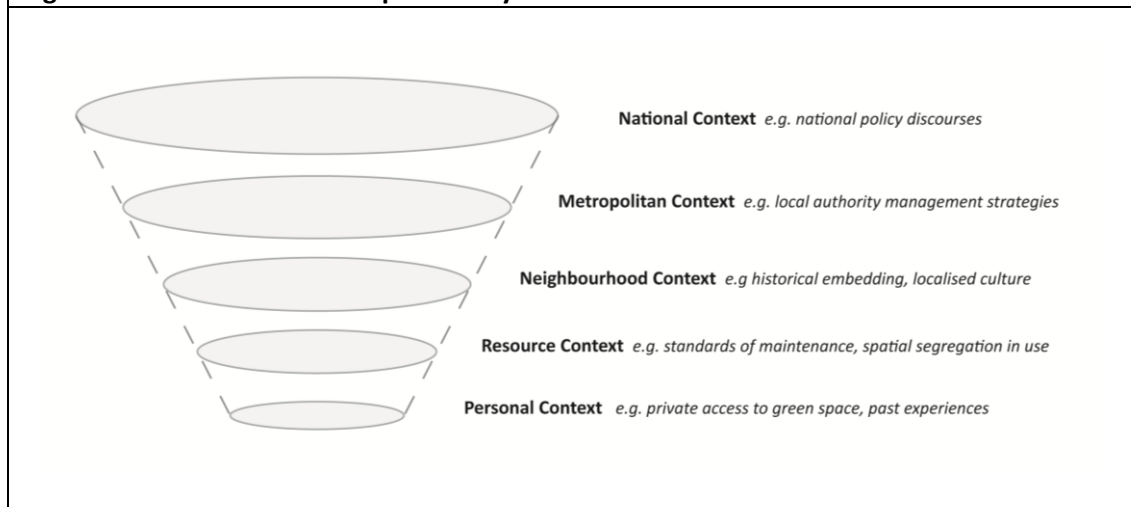
The potential significance of context in questions of value has been highlighted in Chapter 2, with scope identified for contextual factors to play a significant role in influencing both use and more emotive aspects of importance. As Baxter (2010:85) has highlighted, “the context of the case is important, since it more often than not substantially influences the phenomenon in question” and, while it may be possible to understand the nature of an entity through a variety of approaches, a desire to understand this in context necessitates a case study approach, outlined in detail below. Furthermore, integration forms a significant issue in mixed methods research and this theme thus runs throughout this chapter, with emphasis placed on how methods are integrated in this research, not solely in terms of data collection but also analytically and on a philosophical basis.

3.2 Case study research and the issue of generalisation

Case study research aims to develop “detailed, intensive knowledge about a single ‘case’ or of a small number of related ‘cases’” (Robson, 2002:89), producing contextualised knowledge. However, this is not a simple task, because, as highlighted in Figure 3.1, context exists at a

range of scales. The combined influence of these scales also varies greatly between resources and a comparative case study approach is therefore adopted in this study to allow for this uniqueness. A key part of the case study approach is the use of multiple methods to interrogate the example under examination (Robson, 2002). While this has traditionally been associated with the use of several different qualitative methods, the conflation of the case study with qualitative inquiry is largely a relic of prior practice rather than a key part of its definition and, as such, many authors have emphasised the potential utility of mixed methods within a case study, as is the case here (Swanborn, 2010; Gerring, 2007; Baxter, 2010).

Figure 3.1 – Scales of context potentially influential on accounts of value

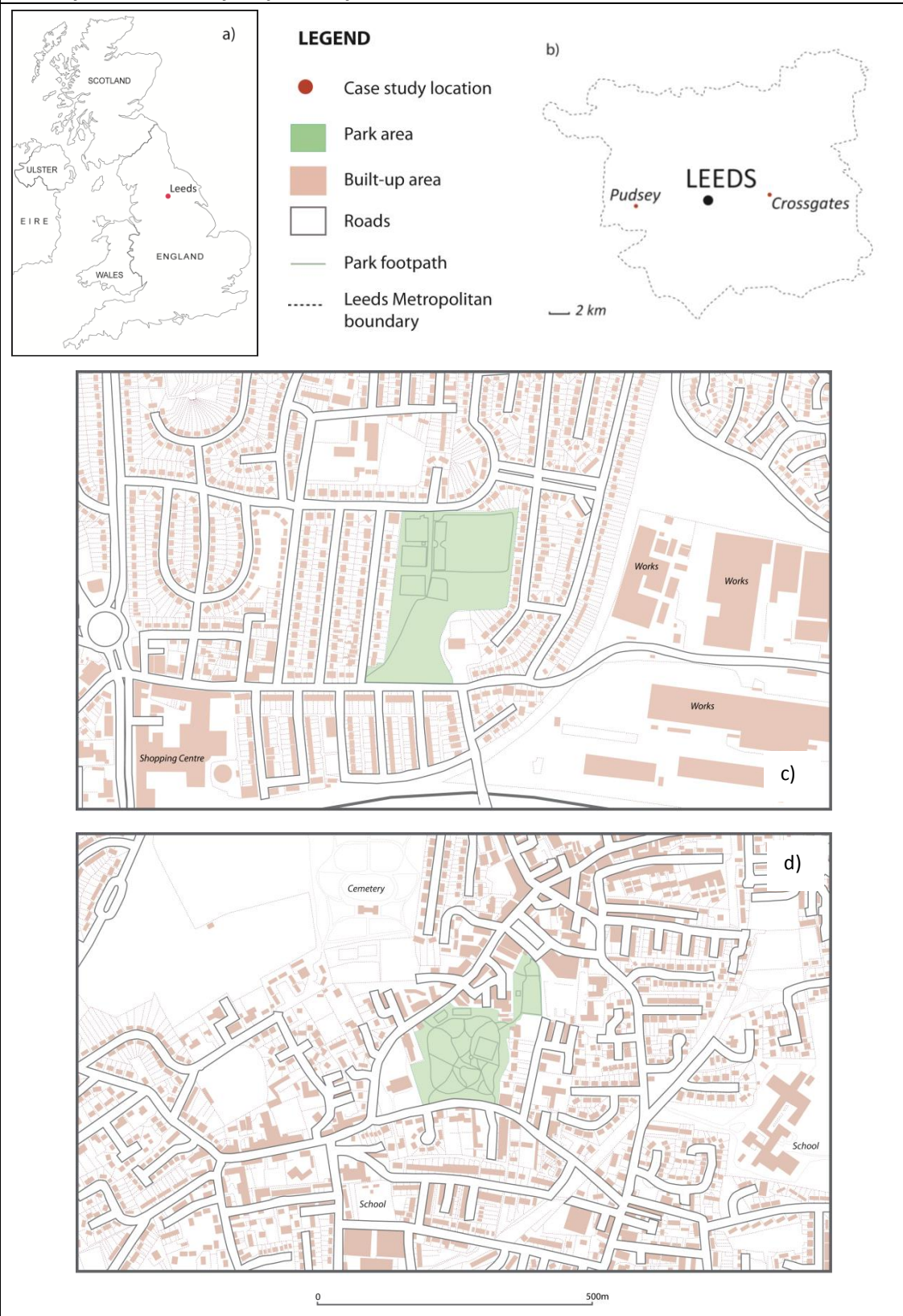


While initially considered a method or research design in its own right, in recent years, authors have found it more appropriate to designate case study research a research approach, given the flexibility it encompasses with regard to data collection techniques (Swanborn, 2010). On these grounds, concerns have been raised as to its validity, with some suggesting case study work offers “a licence to do whatever a researcher wishes with a given topic” (Gerring, 2007:6). In spite of this, it has, nevertheless, become commonplace within social science research (Robson, 2002). Many of the aforementioned concerns derive from a comparison with more traditional cross-sectional quantitative research, which takes a more nomothetic approach to knowledge, looking for universals in the social world (Bryman, 2008). In contrast to this, authors who advocate a case study approach have highlighted that “universals cannot be found in the study of human affairs” (Flyvbjerg, 2006:224), and case study research is thus associated an idiographic approach to knowledge, interested developing a deeper understanding the specific. This is, in some senses, at odds with standard notions of external

validity (or generalisation). However, this is not to say that researchers engaged in case study work are unconcerned with this issue. Instead, it points to a difference of opinion as to what this may constitute.

In contrast to statistical generalisation, case study research engages with the notion of analytical or theoretical generalisation (Robson, 2002). Flyvbjerg (2006) has suggested that this is premised on a principle of falsification and, while many case study researchers may not actively engage with this terminology, many seek to disprove working theories in order to develop a more nuanced theoretical or analytical framework. A comparative design is thought to further enable this offering “opportunities to generate and modify concepts and theory so that they explain commonalities across cases despite contingencies and context” (Baxter, 2010:92). Although the case study parks examined in this study could have been selected from more than one city, instead, the choice was made to keep the two highest levels of context identified in Figure 3.1 (national and metropolitan) constant by exploring two parks within the same urban area. In analytical terms this focus in one city was beneficial, enabling a more thorough interrogation of the relationship between use and aspects of value. However, it also had benefits in terms of rigour as comparable secondary data could be obtained to aid the selection of cases. This thesis draws both its case studies from Leeds, West Yorkshire. Maps, detailing the location of these resources, are provided in Figure 3.2.

Figure 3.2 – Maps depicting case study location in the UK (a), within Leeds (b) and within respective neighbourhoods(c and d). c and d show Manston Park in Crossgates and Pudsey Park in Pudsey respectively



3.2.1 Leeds

Feasibly, this study could have been conducted in a variety of British cities; however, there is scope to question the significance of urban green spaces in Leeds in particular. In 2010, out of all regions in England, Yorkshire and the Humber was highlighted as having the lowest resident satisfaction with parks and open spaces and their provision and the use of these arenas was further noted as amongst the lowest in the country, with only 7 per cent of homes meeting the accessible natural green space standard set by Natural England (CABE space, 2010). In the report '*Urban green nation: Building the evidence base*', this level of satisfaction was linked to the maintenance standards of spaces and, given this, well-maintained spaces would likely be of greater importance to local populations, although this has not been explored to date. While Leeds represents the largest urban centre by population in this region, with over 750,000 residing within the metropolitan boundary (ONS, 2011e), the majority of urban green space research, based in the Yorkshire and the Humber region, has drawn of data from Sheffield (see Barbosa *et al.*, 2007; Fuller, Irvine, Devine-Wright and Gaston, 2007; Özgüner and Kendle, 2006) and there is therefore a gap in understanding as to the significance of urban green space in this city.

In accordance with national policy agendas (Wilson and Hughes, 2011), the provision and quality of green space became a higher priority for Leeds City Council during the 2000s and the Leeds Strategic Plan 2008-2011 stressed increased investment in the maintenance and provision in parks and open spaces, highlighting that the council considered them key to "creating sustainable communities" (Leeds City Council, 2009a). A Parks and Greenspace Strategy was finalised for the metropolitan area in 2009. The city strategy has, however, since been replaced with a new city vision, Leeds 2030 (Leeds City Council, 2014a). This document offers much less mention of urban green space, begging the question as to whether this remains a priority in the current economic climate. Leeds City Council is currently responsible for approximately 4000 hectares of green space within the city boundary (Leeds City Council, 2014b). This provision encompasses five types of park in addition to other forms of green space, such as cemeteries and allotments (see Table 3.1). Given the knowledge gaps identified in Chapter 2, the scale of park examined in depth in this study is the community park. As indicated in the typology, this level of urban park is the smallest scale of park which is intended for use by the whole community and it can therefore be considered the first level of green space designed to be inclusive in terms of the facilities it provides. At the time of study design,

Leeds City Council was responsible for the provision of 63 community parks with varying degrees of use, maintenance and community engagement (a full list of these is available in Appendix 2). The comparative design of this research necessitated the selection of two specific cases from this list and great care was taken to ensure this selection was as rigorous as possible.

Table 3.1: Leeds City Council Urban Parks Typology (reproduced from Leeds City Council (2009b:56))	
CATEGORY - PARKS which are subdivided into:	
Country Parks	Located outside the Leeds conurbation and in the countryside. Provides for the city as a whole and having a wide catchment area beyond Leeds. Includes playgrounds, playing pitches, courts, bowling greens and support for additional provision wherever possible
City Parks	Similar to Country Parks but located within or adjacent to the City
Community Parks	Providing for a community as a whole including formal equipped playgrounds, playing pitches, courts and bowling greens. The UDP has an aspirational minimum target which states that ideally, people should live within 800 metres of an area at least 12 ha. in size
Recreation Grounds	Providing for local informal recreational needs of older children and adults. The UDP has a minimum target which states that people should live within 400 metres of an area at least 2.58 ha. in size.
Local Green Spaces	For immediate local needs, including formal children's play areas and informal amenity space within or adjacent to housing. As a guide it is recommended that around 0.2 ha per 50 dwellings is required. However, it is acknowledged that areas below 0.2 ha perform an important function as a local level e.g. pocket parks especially in densely built up areas where green space is in short supply.

3.2.2 Selecting case study parks

There are many strategies of case study selection, with the most appropriate largely dependent on the relationship to be explored. In this thesis, case studies were selected as contrasting cases on the basis of information collated in a case study selection matrix. To fulfil their requirements under PPG17 legislation, Leeds City Council conducted two studies of green space use in 2006 and 2009. These datasets were obtained in this study, allowing a trend in visit numbers to be identified and added to the case study selection matrix (provided in

Appendix 2). The key point of differentiation between the case study parks was their levels of use, enabling a fuller examination of how this element relates to other aspects of value. One might have expected other forms of value to dominate where direct recreational use was declining. However, questions could be asked as to whether non-use values were unimportant where use was high. The examination of both of these contexts allows for a securer foundation for analytical generalisation. Given both policy and academic suggestions as to the importance of maintenance in the use of public green spaces (see Chapter 2), contrasting cases were selected from the sub-population of the 18 community parks, that had been awarded Leeds Quality Park Awards (see Appendix 2). Poorly maintained parks are likely to retain less of all forms of value and it was therefore more interesting to examine the relationship between use and broader elements of value where the quality of the space was not an impediment to its use.

Manston Park, located in Crossgates, was chosen as an example of a community park with a declining visitor trend, while Pudsey Park represented the most-visited community park managed by Leeds City Council. Aside from their use trends, these case study spaces had many similarities, including, for instance, their size. Both were longstanding parks with Manston Park opened in the 1920s and Pudsey Park established in 1889, and both retained rose gardens as heritage aspects in their design, although Pudsey Park also contained a bandstand. Furthermore, chosen spaces featured a number of common facilities, including bowling greens, children's play areas and teen facilities, although, as highlighted in Figures 3.3a and 3.3b, the character of the spaces diverged somewhat due to their layout. Moreover, in contrast to Manston Park, Pudsey Park had an active 'friends of' group and regular community events, in the form of brass band concerts, in the summer.

Figure 3.3a – Photograph of Manston Park



Figure 3.3b – Photograph of Pudsey Park



The areas in which these cases study resources were situated were also largely comparable according to key indicators. As highlighted in Table 3.2, based on the 2011 census, for instance, the tenure composition for Crossgates and Pudsey was broadly similar at the ward level, with around 67% of homes owned outright or with a mortgage and only 4% more household in social renting in Crossgates and Whinmoor ward. Clearly, statistics at the Ward level are necessarily broad brush given their scale and it is thus important not to overstate similarities. Nevertheless, as evident in Tables 3.3a and b and 3.4 a and b, populations present in case study wards were also similar in terms of age, gender and ethnic composition. It is important to note, however, the localised situation of these spaces was somewhat different, with

Manston Park located in residential area close to a former munitions factory and Pudsey Park situated in a town centre adjacent to a number of shopping streets.

Table 3.2 – Household tenure composition for relevant wards relative to the Leeds average (ONS, 2011a; b; c; d)										
	Crossgates and Whinmoor Ward		Killingbeck and Seacroft Ward		Temple Newsam Ward		Pudsey Ward		Leeds Metropolitan District	
	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>
TENURE										
<i>Owned</i>	2,973	30.4	1,610	15.6	3,051	33.7	2,783	28.2	83,385	26.0
<i>Owned with Mortgage or Loan</i>	3,580	36.6	2,665	25.8	3,209	35.4	3,764	38.1	103,082	32.2
<i>Shared Ownership</i>	29	0.3	44	0.4	19	0.2	76	0.8	1,442	0.4
<i>Social Rented</i>	2,222	22.8	5,078	49.1	1,875	20.7	1,858	18.8	70,377	22.0
<i>Private Rented</i>	824	8.4	713	6.9	803	8.8	1,222	12.4	57,456	17.9
<i>Living Rent Free</i>	151	1.5	225	2.2	107	1.2	168	1.7	4,854	1.5
N	9,779				9,063		9,871		320,596	
NOTE: A very small proportion of the sampling frame for the Manston Park dataset were situated in wards adjacent to the Crossgates and Whinmoor Ward. For completeness, statistics from these two wards are therefore also included for comparison.										

Table 3.3a - Gender and Age comparisons for Manston Park dataset relative to the ward, city, region and national level
(ONS, 2011e; f; g; h; i; j)

	Manston Park dataset		Crossgates and Whinmoor Ward		Killingbeck and Seacroft Ward		Temple Newsam Ward		Leeds Metropolitan District		Yorkshire and the Humber		England	
	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>
GENDER														
<i>Female</i>	75	53.6	11,561	52.3	12,488	52.6	11,091	51.5	383,550	51.0	2,685,655	50.8	26,943,308	50.8
<i>Male</i>	65	46.4	10,538	47.7	11,261	47.4	10,452	48.5	367,935	49.0	2,598,078	49.2	26,069,148	49.2
N	140		22,099		23,749		21,543		751,485		5,283,733		53,012,456	
AGE														
<i>18-24</i>	10	7.1	1,765	10.1	2,186	12.4	1,780	10.7	98,630	16.5	534,607	12.9	4,970,636	11.9
<i>25-34</i>	13	9.3	2,779	15.9	3,090	17.5	2,332	14.0	113,316	19.0	668,632	16.1	7,160,102	17.2
<i>35-44</i>	16	11.4	2,832	16.2	3,259	18.4	2,979	17.9	102,306	17.1	720,793	17.3	7,435,050	17.8
<i>45-54</i>	27	19.3	2,943	16.9	3,231	18.3	3,294	19.8	94,492	15.8	725,788	17.5	7,279,910	17.5
<i>55-64</i>	28	20.0	2,902	16.7	2,470	14.0	2,518	15.1	78,472	13.2	630,607	15.2	6,169,269	14.8
<i>65+</i>	46	32.9	4,219	24.2	3,428	19.4	3,714	22.5	109,598	18.4	874,571	21.0	8,660,529	20.8
N	140		17,440		17,664		16,617		596,814		4,154,998		41,675,496	
NOTE: A very small proportion of the sampling frame for the Manston Park dataset were situated in wards adjacent to the Crossgates and Whinmoor Ward. For completeness, statistics from these two wards are therefore also included for comparison.														

Table 3.3b Gender and Age comparisons for Pudsey Park dataset relative to the ward, city, region and national level
(ONS, 2011k; l)

	Pudsey Park dataset		Pudsey Ward		Leeds Metropolitan District		Yorkshire and the Humber		England	
	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>
GENDER										
<i>Female</i>	78	51.0	11,738	52.4	383,550	51.0	2,685,655	50.8	26,943,308	50.8
<i>Male</i>	75	49.0	10,670	47.6	367,935	49.0	2,598,078	49.2	26,069,148	49.2
N	153		22,408		751,485		5,283,733		53,012,456	
AGE										
<i>18-24</i>	9	5.9	1,708	9.6	98,630	16.5	534,607	12.9	4,970,636	11.9
<i>25-34</i>	15	9.8	2,983	16.8	113,316	19.0	668,632	16.1	7,160,102	17.2
<i>35-44</i>	29	19.0	3,320	18.7	102,306	17.1	720,793	17.3	7,435,050	17.8
<i>45-54</i>	20	13.1	3,198	18.1	94,492	15.8	725,788	17.5	7,279,910	17.5
<i>55-64</i>	28	18.3	2,611	14.7	78,472	13.2	630,607	15.2	6,169,269	14.8
<i>65+</i>	51	33.2	3,911	22.1	109,598	18.4	874,571	21.0	8,660,529	20.8
<i>Unanswered</i>	1	0.7								
N	153		17,731		596,814		4,154,998		41,675,496	

Table 3.4a – Ethnic composition comparisons for Manston Park dataset relative to the ward, city, region and national level
(ONS, 2011m; n; o)

	Manston Park dataset		Crossgates and Whinmoor Ward		Killingbeck and Seacroft Ward		Temple Newsam Ward		Leeds Metropolitan District		Yorkshire and the Humber		England	
	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>
ETHNIC GROUP[^]														
White	136	97.4	20,872	94.4	21,348	90.0	19,960	92.7	639,487	85.1	4,691,956	88.8	45,281,142	85.4
Mixed	2	1.4	350	1.6	706	2.9	433	2.0	19,632	2.6	84,558	1.6	1,192,879	2.3
Asian/Asian British	-	-	576	2.6	874	3.7	433	2.0	58,243	7.8	385,964	7.3	4,143,403	7.8
Black/Black British	-	-	255	1.2	726	3.0	663	3.1	25,893	3.4	80,345	1.5	1,846,614	3.5
Other	1	0.7	46	0.2	95	0.4	54	0.2	8,230	1.1	40,910	0.8	548,418	1.0
Unanswered	1	0.7												
N	140		22,099		23,749		21,543		751,485		5,283,733		53,012,456	

NOTE: A very small proportion of the sampling frame for the Manston Park dataset were situated in wards adjacent to the Crossgates and Whinmoor Ward. For completeness, statistics from these two wards are therefore also included for comparison.

[^] Ethnic groups included in above categories are as follows: White (White: English/Welsh/Scottish/Northern Irish/British; White: Irish; White: Gypsy or Irish Traveller and Other White); Mixed (Mixed: White and Black Caribbean; Mixed: White and Black African; Mixed: White and Asian; Other Mixed); Asian/Asian British (Asian/Asian British: Indian; Asian/Asian British: Pakistani; Asian/Asian British: Bangladeshi; Asian/Asian British: Chinese; Other Asian/Asian British); Black (Black/Black British: African; Black/Black British: Caribbean; Other Black/Black British); Other Ethnic Group (Arab; Any Other).

Table 3.4b Ethnic composition comparisons for Pudsey Park dataset relative to the ward, city, region and national level (ONS, 2011p)

	Pudsey Park dataset		Pudsey Ward		Leeds Metropolitan District		Yorkshire and the Humber		England	
	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>
ETHNIC GROUP [^]										
White	150	98.0	21,210	94.7	639,487	85.1	4,691,956	88.8	45,281,142	85.4
Mixed	-	-	328	1.4	19,632	2.6	84,558	1.6	1,192,879	2.3
Asian/Asian British	1	0.7	732	3.3	58,243	7.8	385,964	7.3	4,143,403	7.8
Black/Black British	-	-	93	0.4	25,893	3.4	80,345	1.5	1,846,614	3.5
Other	-	-	45	0.2	8,230	1.1	40,910	0.8	548,418	1.0
Unanswered	2	1.3								
N					751,485		5,283,733		53,012,456	

NOTE: A very small proportion of the sampling frame for the Manston Park dataset were situated in wards adjacent to the Crossgates and Whimoor Ward. For completeness, statistics from these two wards are therefore also included for comparison.

[^] Ethnic groups included in above categories are as follows: White (White: English/Welsh/Scottish/Northern Irish/British; White: Irish; White: Gypsy or Irish Traveller and Other White); Mixed (Mixed: White and Black Caribbean; Mixed: White and Black African; Mixed: White and Asian; Other Mixed); Asian/Asian British (Asian/Asian British: Indian; Asian/Asian British: Pakistani; Asian/Asian British: Bangladeshi; Asian/Asian British: Chinese; Other Asian/Asian British); Black (Black/Black British: African; Black/Black British: Caribbean; Other Black/Black British); Other Ethnic Group (Arab; Any Other).

3.3 A concern for integration

The acceptance of mixed methods has been variable amongst the social sciences and, while the use of mixed methods has grown within geography (Elwood, 2010), this type of research design has been more readily accepted by cognate disciplines such as sociology (Bryman, 2006; Tashakkori and Cresswell, 2008). A key reason for more sluggish take up within geography is thought to be the philosophical impediments that prohibit the use of both types of methods. As Elwood (2010:94) notes

“The notion of mixing methods rests a bit uneasily alongside long-standing debates in geography that have sought to demarcate clear separations between quantitative and qualitative methods, or between positivist, humanist, post-structuralist and other epistemological perspectives.”

The philosophical problems embodied by Elwood’s (2010) above quote represent one facet of a larger concern in mixed methods research with integration. As its practice has become more commonplace, increasing emphasis has been placed on the need to retain the integrity of any single study. As Bryman (2007:8) notes the qualitative and quantitative components in mixed methods research, in contrast to multi-method research, should be “mutually illuminating” and, as such, integration is vital. Further to its academic importance, integration has also been stressed as crucial where any mixed methods research has policy relevance. Here, Elwood (2010:108) suggests that there are “trends towards legitimising quantitative evidence” in policy arenas and, as such, qualitative and quantitative components of any study must be knitted together to reduce the scope for selective use of quantitative evidence.

Integration has been raised as an issue on three key grounds. Firstly, as indicated by Elwood’s (2010) quote, authors have questioned whether quantitative and qualitative approaches can share a philosophical foundation. Secondly, concern has arisen with regard to the integration of data, with researchers questioning how relatable data collect by quantitative and qualitative means really are and, finally, debate has emerged around the notion of analytical integration. It has been stressed that established analytical techniques exist for both quantitative and qualitative approaches and, as such, there has been pervasive discussion of how these analytical strategies may be adapted to deal with both numerical and textual data. Each of these integrative concerns is addressed in the more detail in the sections that follow.

3.3.1 A philosophical basis for mixed methods research

In human geography, a “divisive gulf” has traditionally been perceived between the quantitative and qualitative research traditions (Philip, 1998: 261) with this division underpinned by the ‘incompatibility thesis’, which posits that these diverse research positions preclude one another (see Howe, 1988 for a discussion). As indicated in Table 3.5, each ‘paradigm’ is thought to be associated with specific ontological and epistemological foundations and therefore incongruent with the other (McEvoy and Richards, 2006). The use of mixed methods has nevertheless become widespread in social science and, in recent years, writers in both geography and cognate disciplines, such as sociology and psychology, have advocated a move beyond this “myopic dualism” (Philip, 1998:273; Sui and DeLyser, 2011; Barnes, 2009; Goetz, Vowles and Tierney, 2009; Teddlie and Tashakkori, 2009; Bryman, 2006). Nevertheless, some, such as Sale, Lohfield and Brazil (2002:44), claim that mixed methods have been “adopted uncritically” and their validity has thus been called into question by suggestions that their use has expanded without resolution of debate surrounding conflicting philosophical underpinnings. This highlights the importance of making the philosophical basis for the use of mixed methods explicit in any study taking this approach.

Table 3.5: Traditional distinctions drawn between the qualitative and quantitative ‘paradigms’ (adapted from McEvoy and Richards 2006:68; Sale et al, 2002)		
	Quantitative paradigm	Qualitative paradigm
Ontology	Tangible reality	Intangible reality
Epistemology	Positivism - Regularities established via empirical research and deductive/inductive reasoning	Interpretivism - Knowledge constructed via social interaction/hermeneutic understanding
Methodology	Hypothesis testing	In depth fieldwork
Data analysis	Verification/falsification	Interpretation of meaning

The primary philosophical approach drawn on in the quest to look beyond the quantitative-qualitative divide has been pragmatism (Johnson, Onwuegbuzie, and Turner, 2007; Johnson and Onwuegbuzie, 2004) and a summary of the key rationales for and critiques of its use as a basis for mixed methods research are provided below. Evidently, however, this philosophical tradition has a long history and features marked diversity. A more complete summary of this epistemology and its evolution is given in Smith (2009). Nevertheless, for some, mixed methods research constitutes a “third paradigm” and the pragmatist perspective has been said

to form a key part of this (Denscombe, 2008:280). Termed 'compatibilist' by some, in the context of mixed methods research, pragmatists have advocated the choice of research methods on the basis of the research problem being addressed (Johnson *et al.*, 2007; McEvoy and Richards, 2006) and this approach has gained popularity by emphasising the commonalities between the quantitative and qualitative research traditions (Greene and Caracelli, 1997; Johnson and Onwuegbuzie, 2004; Johnson *et al.* 2007).

However, in spite of its popularity, critics have argued that the epistemological and ontological issues related to mixed methods (highlighted in Table 3.5) are marginalised rather than resolved by this philosophical standing (Bryman, 2007; McEvoy and Richards, 2006; Sale *et al.*, 2002; Philip, 1998). In some instances, it has been termed an "anti-philosophy" (Johnson and Onwuegbuzie, 2004:18) and pragmatists have been accused of 'paradigm switching' by authors who question their academic credibility (Howe, 1988; Bryman, 2006). While pragmatists themselves may see this switching as an important benefit of their approach, allowing an emphasis on practicality, it has enabled opponents to argue that mixing methods on this basis "often diminishes the value of both methods" (Sale *et al.*, 2002:50). As Elwood (2010:100) notes, the pragmatist approach "enables us to *do* mixed methods" but there appears to be a need to consider an alternative philosophical basis for mixed methods research which views philosophy as a more integral part of research.

The call for increased variety in the philosophical foundation for mixed methods research (Johnson *et al.* 2007) provides an impetus to search for a middle ground between the aforementioned epistemological 'incompatibility thesis' and the 'compatibilist' disregard of these concerns, considered by some (such as Sale *et al.*, 2002) to form part of the pragmatist approach. However, for this to occur a "fluidity and multiplicity in relating epistemology and methodology" (Elwood, 2010:97) is required. Epistemology has traditionally been conflated with research method in a dictatorial manner implying that those who follow a particular research philosophy must accordingly use certain methods, and that those who use particular methods must adhere to a certain worldview (Sale *et al.*, 2002). However, in the context of mixed methods research, it is more useful to not conflate philosophy and method, acknowledging that while epistemology influences research methods, specific techniques are not determined by it (Bryman, 2008; Johnson and Onwuegbuzie, 2004; Greene and Caracelli, 1997). Most mixed methods researchers highlight that, in actuality, the division between quantitative and qualitative methods is in many ways artificial. Bryman (2006) has noted, for

example, that qualitative data can derive from a quantitative method and vice versa and geographers, such as Philip (1998), have highlighted that the focus on the difference between qualitative and quantitative methods has obscured the commonalities between them. What becomes important is finding an epistemological stance which incorporates a view of the world and gathering of knowledge that enables quantitative and qualitative data be related and be considered equally valid.

Drawing on an anti-conflationist stance, this thesis engages with a critical realist perspective as the foundation for a mixed methods approach. McEvoy and Richards (2006:69) suggest that critical realism offers a “more principled” philosophical basis for mixed methods than pragmatism, by enabling the researcher to view both quantitative and qualitative data as useful and analyse them without the need for the ‘paradigm switching’. This relatively new research philosophy emerged in the 1970s with the writings of Roy Bhaskar, whose works, *A Realist Theory of Science* (1975) and *The Possibility of Naturalism* (1979), are considered cornerstones of its foundation (Baert, 2005). Since its inception, critical realism has increased in popularity, offering a way to view social research as scientific whilst simultaneously offering a critique of existing positivist and interpretivist approaches (Baert, 2005). Situating itself on the middle ground it draws on aspects from both established approaches, working to overcome what it sees at their key flaws. It may therefore prove particularly useful in well-established disciplines such as human geography as is it not entirely dismissive of established approaches (Baert, 2005). Evidently, however, as with any epistemological stance, there is diversity within the critical realist approach (Danermark, Ekström, Jakobsen and Karlsson, 2002) which may have been exacerbated, to some extent, by its application to both natural and social sciences. Different aspects are adhered to more or less stringently by different authors (for instance, contrast Sayer (1992), Yeung (1997) and Bhaskar (1975)). The key aspects of the approach, engaged with in this thesis are outlined below (for a more extended introduction see Baert (2005) or for a more detailed discussion of critical realism in social science see Danermark *et al.* (2002)).

As indicated by its name, critical realism adopts a realist ontological foundation, advocating that a real world does exist external to people’s perceptions of it. Together with this it is suggested that researchers can in principle access this reality. A notion of human fallibility is, however, encompassed as it is acknowledged that social scientists can be mistaken within this. This is where this perspective differs notably from postivism which suggests that “the

scientist's conceptualisation of reality actually directly reflects that reality" (Bryman, 2008:14). The incorporation of human fallibility is enabled by the "stratified notion of reality" that is the foundation of the critical realist approach (Baert, 2005:92). This view of reality differentiates between the level of the actual (observable events), the empirical (people's perceptions of these events) and the real (underlying structures and generative mechanisms for these events). It is this stratified reality that appears to open the door most readily to a mixed methods approach as quantitative methods can be employed to glean data on observable events while qualitative methods can be utilised to access people's perceptions of these at the empirical level. This view of reality also forms a middle ground between structure and agency and allows for the idea that the mechanisms generating events may not be, and often are not, observable.

Retroduction, the critical realist view of causation, engages with the search for these unseen mechanisms, its logic examining causal processes rather than looking for commonalities between different variables. As McEvoy and Richards (2006:71) emphasise it "involves moving from the level of observations and lived experience to postulate about the underlying structures and mechanisms that account for the phenomena involved". This form of reasoning appears very worthwhile as it leaves space for inconsistencies between what happens, what people think about events and the causes of these events. The attention to generative mechanisms in this thesis allows for the consideration of contexts, narratives and societal norms that may influence how people use and experience their local green spaces and shape the importance of locality and greenery in the lives of individuals. These two aspects, use and perception, taken together can be framed theoretically within the notion of value.

While this study retains a broad affinity with a critical realist approach, this is not to say that I see no problems with this stance. It has been highlighted by authors, such as McEvoy and Richards (2006,) that from a critical realist perspective the most valid account is the one with the most explanatory power. However, while I can accept the potential benefits of retroductive reasoning and the notion of searching for causal processes or mechanisms, I struggle to see how the decision can be made than one account contains greater explanatory power than another. In this work, any explanation is considered to contain greater explanatory power where it accounts theoretically for more of the data in the course of analytical generalisation. This work engages more readily the second key aim of critical realism, identified in the literature, which is to gain a more complete understanding of the

world. In looking to do this, it has been highlighted that some have struggled to put the critical realist perspective into practice (Baert, 2005) and, where this has been achieved, it has been more common for critical realists to utilise solely qualitative methods due to their potential flexibility (Baert, 2005). However, writers in critical realism have highlighted the benefits of quantitative knowledge, allowing for the development of a mixed methods research design (McEvoy and Richards, 2006). The design of this study is explored in the section the follows.

3.3.2 Ensuring data integration

Mixed methods research has also had subject to debate as to integration in its implementation and controversies persist in this area (Creswell, 2011). Many of these issues revolve around the extent to which methods, and resultant data, can truly be considered 'mixed', with concerns reflected in continuing debates as to the distinction between multi-method and mixed method research (Elwood, 2010). As Yin (2006:41) highlights the "continuing challenge is to maintain the integrity of the single study compared to inadvertently permitting the study to decompose into two or more parallel studies". Integration is, however, by no means an easy task and a number of barriers to it have been noted (for more detail, see Bryman (2007)). Questions have also arisen regarding what this 'mixing' truly means (Tashakkori and Creswell, 2008).

Data integration is, nevertheless, seen as a precursor to analytical integration and a variety of strategies have been suggested to promote this. It has been highlighted, for instance, that data integration can be facilitated by certain strategies of research design (Yin, 2006; Elwood, 2010). A number of typologies have been published as summaries, or perhaps guidelines, for the design of mixed methods research (see Teddlie and Tashakkori, 2009, 2006; Creswell and Plano Clark, 2007; Greene, Caracelli and Graham, 1989) and sequential designs (such as that adopted here) have been highlighted as useful in ensuring data integration. In sequential design, research is conducted in stages, with each preceding stage informing later ones. The samples from which data are drawn in later stages are also nested in those previously collected, allowing data to be easily related.

As demonstrated in Figure 3.4, this study is designed in three stages and, as is common in mixed methods research, addresses the majority of its research objectives through the use of a social survey and semi-structured interviews (see Table 3.6) (Bryman, 2006). The first stage delves further into the context of the chosen case studies, gleaning information about the neighbourhood context in which they are provided and the use context of each resource. The

second stage draws on the first stage to inform the construction of questionnaires and utilises these to examine use more closely. In particular, this stage considers how frequency of use and activities may vary amongst different user groups. In the third stage information on use is related to the broader notion of value as a proportion of questionnaire respondents, both frequent and infrequent users, are interviewed about what the case study space in question means to them. These stages are discussed in turn in the sections that follow.

Figure 3.4 – The sequential research design employed in this study

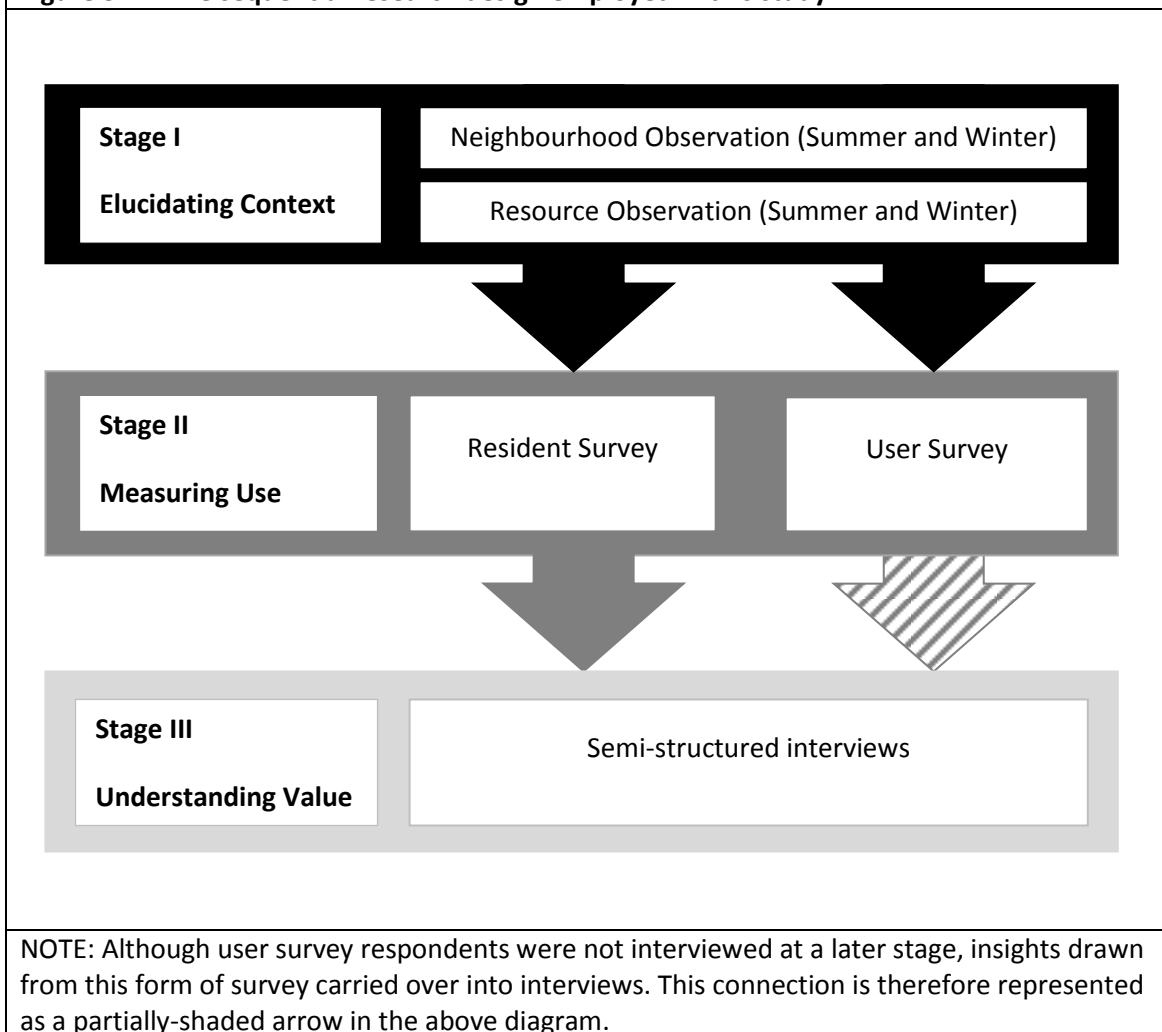


Table 3.6 – Research objectives and the contribution of different data sources				
	Neighbourhood and Resource Observation	Social Survey		Interviews
		Resident	User	
How is direct use represented in individual accounts of importance? How dominant is this facet and what motivates use?	X	X	X	X
How do aspects raised in discussions of place, such as negativity and temporality, manifest in accounts of importance?		X		X
What connections are drawn between facets of importance? Does direct use dictate overall levels of value or are these aspects distinct?		X		X

3.3.2.i Stage I: Elucidating Context

As highlighted in Figure 3.1, the value attributed to a community park by any person is influenced by context at a range of scales. For the production of contextualised knowledge, the main aim of case study research, it is important to gain an understanding of context at each of these different levels. As noted in section 3.2.2, the selection of two case studies within one urban area limits the information required related to higher levels of context, allowing for a more detailed exploration of smaller contextual scales. As personal context is explored using social survey and interview methods in later stages, this initial research stage focused on gaining information on the other levels of context.

Neighbourhood Context

There are many facets to neighbourhood context, relating both to its physical structure and the collective of people that reside in and frequent it. Any perspective on the value of a community park is influenced by a range of these aspects, relating to both the permanency of that resource (the length of its provision) and the permanency of the population that

surrounds it (population turnover). Where a resource has existed for many years, the space may have become closely intertwined with neighbourhood identity or reputation and, thus, possess greater importance for residents. In some instances, a localised form of culture could also form around some facilities, further influencing the worth attached to them. The existence of a 'friends of' group, for instance, could in some cases, generate a localised positive narrative about the park in question and, thus, augment the value of this resource due to increased community engagement. If negative narratives (for instance around crime and disorder) were present, these could also act to lessen the importance attached to these spaces. While some data on neighbourhood and resource context, such as population turnover, can be gleaned from social survey and interviews conducted in later research stages, in this stage, data at these levels was gathered through observation. As highlighted by Kearns (2010:241) observation as a research method has been "undervalued" in human geography and has been seen by some to be "of limited value" particularly when contrasted with more quantitative methods (Fyfe, 1992:128). Observation can, however, be very useful, providing valuable insights to contextualise knowledge gained through other means.

As a method, observation can provide data on not just what is seen but also the experience of a place, gaining insights from the other senses (Kearns, 2010). The extent to which an observer engages with their setting of interest is however variable. Gold (1958:219-221) suggests four possible degrees of involvement: "complete participant"; "participant-as-observer"; "observer-as-participant" and "complete observer". The level of engagement in this study was relatively superficial with the researcher taking the role of "observer-as-participant" with the intention not to interact with those observed. Despite this intention, the researcher could not be considered a 'complete observer' as the observation required their presence in each public space and, with this, a researcher may "unwittingly alter the research setting" (Kearns, 2010:246). Much of this unwitting alteration stems from the way in which the researcher might be positioned by those they are observing. In this instance for example, if noticed, park users may have believed the observer to be employed by local council and the power relation in this relationship may have unduly influenced the way in which individuals behaved. Even where this assumption was not made, the researcher may have been considered 'out of place' due to their being a stranger in a community space which may be frequented regularly by the same people.

Observation of the neighbourhood setting enables a broader understanding of the physicality of the park resource within its locality. In this case, notes were taken on Access, Housing, Maintenance & Lighting and Services, all of which could influence the level and type of use of case study spaces. Points of note in all of these categories are given in Table 3.7. Proximity has already been highlighted as influential in Chapter 2 and aspects of access, such as transport and walkability, had the potential to inhibit certain users in their use of the space. Where similar types of housing dominated in an area, the potential for a dominance of certain user groups was highlighted. Maintenance & Lighting were also noted down as these aspects have been connected to the prevalence of fear of crime amongst residents, which also has scope to restrict use. Finally, the presence and diversity of other services were observed as their proximity may have altered the propensity for individuals to use the park. An understanding of the location of proximate services was also thought to indicate the likelihood of certain uses, for example, where a park is located between a residential area and services such as doctors, dentists or shops, this space may be more readily be used as a cut through. This observation was repeated in both winter (Oct-Mar) and summer (Apr- Sept) as seasonal changes were likely to have a large impact on the accessibility of the resource. Furthermore, issues with Maintenance & Lighting were likely to be more apparent and of greater importance in the winter months.

Table 3.7 – Points of note in neighbourhood observation	
Category	Specific points of note
Access	Transport <ul style="list-style-type: none"> • Car parks • Parking Restrictions • Proximity to Public Transport e.g. bus stops and train stations
	Walkability <ul style="list-style-type: none"> • Quality of paving • Road Traffic
Housing	Type
	Age
Maintenance & Lighting	Street Lighting
	Signs of Upkeep
Services	Proximity and Location
	Type

Resource Context

An appreciation of the effect of seasonality is equally important in accessing contextual information at the level of the resource as changing seasons can significantly alter the character of and activity in an urban park. In this study, observation was used to understand how aspects of design may impact the use of each space. While some studies, such as Sullivan *et al.* (2004), focused their observation in periods of fine weather, given the variable climate of the UK, observation in this study was conducted in both winter (Oct-Mar) and summer (Apr-Sept) months. School holidays may also be influential on the prevalence of children in the space and, as such, summer and winter observation was conducted both during school holidays and outside of them. The observation conducted in this stage provided general information about the space including its maintenance, together with data on where activities were being carried out, what activities these were and who (in terms of age and gender) was making use of the space.

The location of activities and people within the space was an important aspect of this data and behaviour mapping was therefore employed in data collection to retain this spatial dimension. Behaviour mapping involves recording details of individuals (age and gender) and the activities they are undertaking onto a base map of the area (a sample base map for Manston Park is provided in Figure 3.5). This process is repeated on a number of occasions and data is then compiled to “disclose the pattern of behaviour in a given space” (Moore and Cosco, 2010:34). In the field, observations were recorded onto black and white plans using a series of codes which were then transformed into coloured maps (an example in field data sheet and written up coloured map is provided in Appendix 3). The data collection instruments and codes were piloted in the first round of observation. While an initial plan could be derived for each case study space from ordnance survey maps, these instruments were treated as malleable and amended in the field, for example, the basketball court shown in the map for Manston Park in Figure 3.5 was not present on the initial plan. Similarly, a list of common urban green space activities (such as dog-walking) was drawn up prior to initial fieldwork and codes assigned to them. However, during course of observation other activities were added including seasonal activities (such as sunbathing) and informal sports (such as cricket). As an approach, behaviour mapping has been employed by design researchers to understand the effects of a design intervention in an urban green space, especially on the behaviour of children (see Cosco, Moore and Islam, 2010). However, in this study behaviour mapping was used for a broader purpose to understand the activity of all users in the space and how this may segregate

spatially. These data were then used to inform the construction of data collection instruments in later stages.

Figure 3.5 – Sample behaviour mapping base map for Manston Park



Observation Legend

Baby	b	1 Dog walking	10 Basketball
Young Child		2 Walking	11 Supervising Child
Female	oa	3 Playing	12 Skating
Male	xa	4 Running	13 Sitting
Older Child/Teen		5 Socialising	14 Maintenance Work
Female	ob	6 Playing Tennis	15 Playing Music
Male	xb	7 Bowling	16 Buying Icecreams
Young Adult		8 Football	17 Sunbathing
Female	oc	9 Cycling	18 Cricket
Male	xc		19 Rugby
Older Adult			
Female	od		
Male	xd	- Arrows for direction	
Elderly		- Wheelchair users in squares	
Female	oe		
Male	xe		

Although behaviour mapping offers a useful data reporting method, and provides a good basis for data collection in later stages, it is not without its limitations and there are several challenges in its implementation. Many urban green spaces, including case study spaces, contain buildings and vegetation of varying heights which prevent an observer from viewing the whole space from a given point. While posing a problem for all observational methods, this presents a particular issue in behaviour mapping as the exact location of each individual must be noted. In this study, this problem was overcome through the use of route observation. In each observation, the researcher walked a pre-determined route to ensure that the whole space was viewed. This form of observation introduces a risk of double-counting for moving individuals. However, in order to avoid this only one observer was used. Any moving individuals were noted only in the location they were initially seen, together with their direction of movement. Behaviour mapping can also be problematic in very busy spaces where there are issues in the speed of recording. Some suggest the use of GIS and PDAs for data collection to improve the speed of data collection (Moore and Cosco, 2010); however, this technology requires some investment and was therefore not utilised in this particular project. Speed of recording did however improve with practice. The extent of this problem was also limited by the relatively small size of both case study parks which somewhat restricted the number of visitors in each space at any one time. A final issue may relate to the recording of age (and perhaps gender) as this can be difficult to observe. This problem is somewhat unavoidable in any observational method; however, any bias in data was kept consistent through the use of only one observer. Furthermore, age groupings were kept broad and where it was impossible to record gender (for example for babies), a separate category was created.

Personal Context

With the desire to understand the importance of a resource within a neighbourhood, it can be easy to forget that residents are individuals whose own experience may influence the value they attach to a space. It is therefore important, in addition to the levels of context discussed above, to understand the participants' personal circumstances as these could alter markedly the potential for an individual to value a space. Those with children may, for instance, place a greater value on these spaces than others and those who own dogs may be more tolerant of the use of the space by dog walkers. Similarly, individuals who have private gardens may place less importance on the availability of public green space. The permanency of these personal experiences should also feature in any consideration of personal context. For example, if an

individual has always had access to private green space but has rarely experienced well-maintained public green space then the importance of a community park may be enhanced for them. The aspects they consider key are therefore not solely a function of their present circumstance but also their housing life course and their perceptions of their neighbourhood as a whole and information must be gleaned in relation to these aspects.

While appreciation of other contextual levels can be gained through unobtrusive methods, in order to gain an appreciation of personal context there is a need to engage with individuals. Therefore, while Stage I was centred on the collection of the majority of contextual data, data on personal context was collected in later stages. Questionnaire data collected in Stage II incorporated data in relation to a variety of personal circumstances. Individuals were asked, for example, whether they had access to a garden and whether they had or looked after young children (as both of these factors may influence use of a space). Respondents were also asked how long they had lived in their current property (as this may have been indicative of neighbourhood engagement). The permanency of personal experience was more readily understood in Stage III, where, in the course of semi-structured interviews, individuals were asked about how the park may have altered during their time in the area. These stages are discussed in more detail in the sections that follow.

3.3.2.ii Stage II: Examining direct use

As highlighted in Chapter 2, direct use has been emphasised as a key facet of the value attached to community parks, and urban green spaces more broadly. Both policymakers and academics have focused on this aspect and, while this thesis aims to broaden its attention to other aspects of value, it was important to gain a clear understanding of direct use as a starting point for wider investigation. Levels of use could have been investigated using a range of methods, however many of the questions asked in ascertaining use behaviour, are, by nature, numerical (for instance, frequency of use) and, as such, lend themselves to quantitative approaches, such as the social survey methods adopted in this study. This is not to say that the use of questionnaires determines the collection of solely quantitative data. McGuirk and O'Neill (2010:191) stress that in human geography, social surveys often "involve the collection of quantitative *and* qualitative data", featuring, for instance, a variety of open questions in addition to the closed questions mentioned above. However, the qualitative data collected in the course of questionnaire survey is considered somewhat limited in depth by many

researchers (McGuirk and O'Neill, 2010) and in this study, answers given in this second stage of data collection fed into deeper qualitative methods in Stage III.

As Parfitt (2005:78) notes, “the questionnaire survey has become an indispensable tool” in human geography research and social survey methods have been widely adopted in examining the use of urban green space. In any social survey, the response rate achieved is a key concern (Bryman, 2008; Parfitt, 2005). This is because, as Bryman (2008:219) notes, “unless it can be proven that those who do not participate do not differ from those who do, there is likely to be a risk of bias”. While some statistical strategies can be adopted in analysis to attempt to account for this potential non-response bias, it is difficult to know the true extent that participants differ from non-respondents. Therefore, as Parfitt (2005:86) stresses, “rather than adjusting for non-response bias, it is far better to ensure that it does not get out of hand in the first place” by maximising the response rate. Traditionally, this desire to maximise response rates has been associated with an aim of statistical representativeness, in accordance with a quest for external validity (discussed in Section 3.2). The approach discussed here engages with a different form of generalisation, theoretical generalisation, but it nevertheless remains important to maximise response rate where possible as a firm analytical foundation is required for theoretical generalisation and a range of perspectives must be incorporated into a data set. This is particularly important, given the potential influence of personal context and it is therefore essential to try to promote response from, for example, all age groups. This study obtained response rates of 28% and 31% in the Manston Park and Pudsey Park surveys respectively, which are markedly higher than the 10-15% return common to postal surveys.

The design of a questionnaire survey and its distribution are considered key influences on the response rate achieved. Design has been stressed as important as this affects the ease with which a questionnaire can be answered. In addition to standard concerns of legibility and clarity in the questions posed, the length of the final questionnaire has been a central concern. While there may be a plethora of questions a researcher may wish to ask a respondent, a compromise must be reached. As Parfitt (2005:78) notes, it is important not to “waste respondents’ time” as concerns have been raised regarding a general erosion in the “public tolerance for survey research”, which is only exacerbated by poorly designed and overly lengthy survey instruments. Tolerance for certain survey designs varies, however, depending on distribution method. It has been highlighted that survey distribution largely comes down to a choice between an interviewer-administered survey and a self-administered one; however,

the tolerance for lengthy questionnaires is vastly reduced in the latter of these options (Bryman, 2008). Many studies have conducted interviewer-administered surveys focusing on the users of urban green spaces (including Sanesi *et al.* 2006 and Bjerke *et al.*, 2006). However, this study expands upon this previous work by conducting a majority of self-administered resident surveys in addition to an interviewer-administered user survey. These surveys are discussed in more detail below.

Resident survey

The aim of the resident survey was to incorporate a consideration of those that do not use the spaces but may still value them, in accordance with the study's aims. Self-completion questionnaires were therefore considered most appropriate as they removed interviewer effects (Bryman, 2008). In an interviewer-administered survey individuals may have been less inclined to accurately portray their non-use due to, for example, acquiescence bias, in which respondents say what they think the interviewer wants to hear but this is not the case for self-completion surveys. This is not to say that self-completion questionnaires are without their flaws. They often, for instance, obtain lower response rates and there is thus great potential for aforementioned non-response bias. Nevertheless, the sample of respondents for this survey was dispersed throughout each neighbourhood and this form of survey was therefore considered most appropriate.

Given this tendency to low response, "the self-completion questionnaire [...] requires extra care in its design and layout" (Parfitt, 2005 :102). While questionnaires can be a little longer as respondents can complete them at their own convenience, every effort must still be made to restrict the number of items included. Bryman (2008) also suggests that open questions should be kept to an absolute minimum and avoided where possible as potential participants can be deterred by the prospect of writing a lot. A sample of the questionnaire utilised in this survey is given in Appendix 3. It should be noted that it contains only 3 open questions to encourage response. A 'Comments' section is nevertheless also provided to allow respondents to add to any responses, should they wish to. Distribution is also highlighted as key in promoting response. As is commonly the case, questionnaires were distributed by post. In many cases, this promotes the lowest response rates, with younger adults in particular often underrepresented. (Bryman, 2008). However, in this survey, envelopes were hand-written to pique the curiosity of respondents and ensure as many questionnaires were opened in an attempt to ensure a higher return from all groups.

The sample for this survey was drawn in a systematic fashion from the edited electoral roll, as the most complete sampling frame of adults resident around each park. In order to refine this sampling frame, a distance limit on the residences for inclusion was defined and an 800m buffer zone was decided upon in accordance with the typology given in Table 3.1. This buffer zone was then cross referenced with a list of residential addresses in Pudsey and Crossgates. While Pudsey Park fell well within the confines of Pudsey Ward, the same could not be said for Manston Park in relation to Crossgates and Whinmoor Ward. Here, following application of the 800m buffer a small number of addresses fell into two further wards, Killingbeck and Seacroft and Temple Newsam, and edited electoral rolls were therefore purchased for these areas as well to enable inclusion of these addresses. Consistency between case studies was considered important in both the distance of the buffer and the sampling fraction utilised, as the use of a consistent sampling fraction took account of local variations in residential density.

An initial pilot survey of 100 questionnaires was conducted around each of the case study parks. The purpose of this pilot was twofold. Firstly, it tested the design and quality of the questionnaire instrument allowing for modification (see Appendix 3 for sample pilot and final questionnaires). Secondly, the pilot tested the distribution distance utilised. The study's aims necessitated an examination of a diversity of use behaviour (at least in terms of frequency) and pilot results were therefore analysed to determine the proportion of non-users and users. Had the proportion of non-users been considered low, the distribution distance may have been increased to incorporate more individuals who may not use the park but may value it. A tertiary benefit of the pilot was that it allowed an understanding of numbers of people volunteering to be interviewed in Stage III to be ascertained. Had this been considered low, incentives to encourage volunteering could have been modified. Final response numbers ascertained in relation to Manston Park and Pudsey Park are provided in Table 3.8. A detailed summary table of these datasets is provided in Appendix 4. As highlighted in Tables 3.3a and b, in common with most postal surveys, older people were overrepresented and younger people underrepresented, in responses. Case study datasets were however comparable to census data in terms of gender distribution and ethnic composition (see Tables 3.4a and b).

Table 3.8 – Resident survey response figures.				
	Manston Park dataset %		Pudsey Park dataset %	
	Frequency	%	Frequency	%
Pilot (100)	28	28	32	32
Full Survey (400)	112	28	121	30.25
Total (500)	140	28	153	30.6

User Survey

User surveys in this study were conducted over three days (two weekday and one weekend) in each case study community park. Given seasonal variation in use, identified in Stage I of the research, these three-day surveys were conducted during the summer months (between April and September) in order to provide for the greatest response. In addition to questions related to frequency of use, users were also asked to give their postcode so that the distance that they had travelled could be established. Participants were also asked about their mode of transport so that the importance of neighbourhood accessibility restrictions (a part of neighbourhood context, identified in Stage I) could be discerned. A further weekday was utilised prior to the user survey in order to pilot the questionnaire and ensure that items and the distribution methods were appropriate. A copy of the final user response recoding sheet is included in Appendix 3.

Given the nature of the user survey, no sampling frame was available. As such, questionnaires were distributed through a form of convenience sampling, approaching people within case study spaces. While initial intentions were to systematically sample the accessible population, approaching every 5th person, in order to improve rigour. The disparity in user numbers between case study spaces made this unviable. Poor weather during data collection also diminished users and made people reluctant to stop. Purposive sampling was therefore employed in order to maximise the number of responses and variety of perspectives obtained. On this basis, everyone who walked by was approached and a running tally kept of respondent age groups and genders. Where there was a need to choose between people, the most underrepresented group was chosen to ensure as broad a spectrum of perspectives as possible. In spite of this, datasets remained small with 47 users surveys collected for Manston Park and 80 collected for Pudsey Park. A further limitation of these surveys was that Likert scale items associated with other aspects of value, could not be included as they are highly vulnerable to ‘acquiescence bias’ in an interviewer-administered setting. Use behaviour could

thus not be related to a broader sense of value in this sample. This limited the scope for their inclusion in analytical chapters. A dataset summary table is nevertheless included in Appendix 4 for completeness.

3.3.2.iii Stage III: Understanding value

Stage III expands the scope of this study beyond that which has dominated in other research, namely use, to examine the connections between this and the broader importance of the community park. While the questionnaire surveys of Stage II could readily measure the direct use of the spaces, social survey methods struggle to access the more emotive, attitudinal and experiential aspects of value. Although the resident survey, discussed above, included Likert scale items to give an indication of general attitudes to urban green space and a few questions which require extended answers, these fell short of accessing residents' deeper values regarding their community park. As such, this stage employs semi-structured interviewing in order to gain an understanding of these deeper aspects. As McGuirk & O'Neill (2010:192) highlight:

“Questionnaires...can be combined effectively with complementary, more intensive forms of qualitative research such as interviews and focus groups, to provide more in depth perspectives on social process and context”

Qualitative interviewing has been widely acknowledged as a useful method to “understand how individual people experience and make sense of their own lives” (Valentine, 2005:111). While authors such as Hitchings (2010) have used interviewing to examine urban green space use amongst a working population, in this study, it was adopted to uncover individuals' experiences of part of their residential environment and the meanings they attach to this space. Interviewing has been highlighted as useful in understanding “how meanings differ among people” (Dunn, 2010:102) but in order to get a clear picture of this difference, it is important to ensure the inclusion of a diverse range of people.

During this stage, 25 one-off interviews were conducted, 11 in Pudsey and 14 in Crossgates. These individuals were a subset of survey respondents who had volunteered as part of the questionnaire to be contacted for follow-up interview. In interviewee selection, every effort was made to obtain a diversity of opinion and participants therefore varied greatly on a range of criteria. Interviewees were obtained from most age groups and efforts were made to get a balance of genders (see Table 3.9 for details). Unfortunately, given the manner of recruitment, some aspects of bias in questionnaire samples were carried over to interviews. Like many social surveys, there was, for instance, a low survey response amongst the youngest adults. This meant a smaller pool of potential interviewees from this age group and thus led to difficulties in their recruitment in Pudsey. Similarly, there were further challenges in recruiting participants aged 85+ in this area. Both of these groups could have provided additional insights.

Efforts were also made to speak to individuals who varied greatly in terms of personal circumstances and this aim was facilitated by the personal information obtained in questionnaires. The employment statuses of participants, for instance, were diverse as perspectives were obtained from those who worked full-time, those in part-time employment, retired individuals, students, homemakers and those with a long-term limiting illness. Amongst those who worked, there was also variability in the types of jobs undertaken and it was therefore possible to gain some appreciation of the impact of class and income on the significance of park spaces. Interviewee jobs included a haulage driver, teacher, builder and business professionals to name a few.

Participants also illustrated a range of family situations with perspectives offered from those with and without children. For the most part, those with children were drawn from more traditional family units; however, two individuals also provided a perspective from the context of single parent families. Given the study's focus on the connection between use and value, interviewees also represented a range of levels of use with some using case study spaces frequently and others rarely visiting. Participants further diverged in terms of levels of community involvement with some highly engaged in community activities and others having relatively little connection to their neighbourhood through local groups. Importantly, the representation of ethnic minority groups amongst interviewees was limited to only one individual. While, as noted in Tables 3.4 a and b, the neighbourhoods surrounding case study spaces were not characterised by high levels of ethnic diversity, survey datasets contained a

marginally higher response from White British individuals and this dominance carried over into interviews. Invariably, however, ethnic minority groups may have had notably different opinions as to the significance of case study spaces.

Table 3.9 – Interviewee Age and Gender Distribution				
	Manston Park Interviewees		Pudsey Park Interviewees	
	Female	Male	Female	Male
18-24	1	2	0	0
25-34	0	1	2	0
35-44	0	1	0	1
45-54	1	1	0	1
55-64	1	1	2	1
65-74	2	0	1	1
75-84	0	1	1	1
85+	1	1	0	0
Total	6	8	6	5

Interviews are able to provide greater insight into meaning and greater depth due to their fluid structure (Dunn, 2010). In contrast to questionnaires which restrict respondents to answering specific questions, interviewees can often shape the course of an interview themselves as the questions asked and framing of issues depend on the interests and views expressed by the participant (Valentine, 2005; Dunn, 2010), although, face-to-face delivery in the interview method can dissuade individuals in sharing information on sensitive or difficult topics. Depth is, nevertheless, further enabled through constant comparison by the researcher (Valentine, 2005; Glaser and Strauss, 1967). Throughout the exchange, the interviewer analyses participant responses, asking them to explain any inconsistencies or contradictions and perhaps nuance any broad statements that are made. Having access to data derived from Stage II facilitated this process in this study, allowing the researcher to not only draw comparisons within interview material but also to contrast these answers with use information and general attitudinal data that had previously been gathered.

The flexibility of the interview method also forms an important strategy to ensure the collection of deeper and more relevant information. This openness to change is pertinent to the analytical strategy adopted in this study (discussed in section 3.3.3) which emphasises an iterative relationship between the analytical and data collection process. This strategy also determined, through theoretical saturation, the number of interviews conducted. In accordance with this, the first five interviews conducted for each case study were considered

pilot interviews. Interviews ranged in length from around 20 minutes to almost 2 hours; however they typically lasted approximately 25 minutes. In terms of character, discussion tended to be casual and chatty, although this was limited somewhat for some by the presence of a dictaphone as all interviews bar one were audio recorded and fully transcribed. All pauses and utterances (phrases such as 'err' and 'like') were included in transcription. Participants' accents were also retained in the process of transcription in an attempt to authentically represent the voices portrayed in the data.

Piloting also allowed the researcher to get a feel for the themes that were emerging and nuance aspects of the interview schedule on the basis of answers provided. The interview schedule was however treated as a reminder of topics it would be useful to cover and a prompt for potential questions rather than a prescriptive structure to follow. As demonstrated by the pilot and final interview schedules included in Appendix 3, changes resulting from piloting were relatively limited. The key change made was the inclusion of a further introductory question relating to the character of the area. This was added to help extend participants accounts, putting them at greater ease, talking about their neighbourhood in general, before they spoke about their own personal experiences. In response to this question many residents offered interesting insights into narratives of residential change and town decline, although these data are not presented in this thesis, they nevertheless provided additional useful contextual information in the course of analysis.

The interviews were conducted, where possible, within the home of the participant because, as Valentine (2005:118) notes, "talking to people in their own 'territory' ... can facilitate a more relaxed conversation" and therefore promote greater depth in data which is vital to the analytical process. Speaking in familiar and comfortable locations also alters interviewer-interviewee power relationships, helping to redress somewhat this imbalance. Interviewing at home was only not possible for one interviewee from Crossgates who was interviewed in a café close to his workplace. Every effort was also made to enhance the convenience of interviews for participants. This meant that they took place at a range of times on both weekdays and weekends. For the most part, interviews with retired people took place during the day, while those who worked full-time were mostly interviewed on weekends. As mentioned in the interview schedule (given in Appendix 3), an indication was also obtained from all participants as to the maximum amount of time that the interview could take in a further effort to put interviewees at ease. This question did however lead to some differences

between the length of interviews for different groups with stay-at-home mothers representing those interviewees with the greatest time pressure and thus the shortest interviews.

Power relations are a particular concern in qualitative research, although authors, such as Rose (1997:305), have stressed the need for all researchers to “acknowledge their partiality” due to its potential to impact insights gleaned in both data collection and analysis. Given this study’s focus on the significance of park resources, questions of positionality become quite acute as the potential for participants to overstate the value of case study spaces due to a desire to give what they perceive as the ‘correct’ answers could be quite great. Although I use green space on occasion, in no way was this action research and, as such, every effort was made to emphasise the exploratory nature of this work. Furthermore, rather than specifically asking interviewees about how they valued case study spaces, and discussion of importance was premised on information given in previous questionnaire responses where interviewer-effects were not so great.

In an interview setting, levels of acquiescence may also have been diminished due to my age. With many participants drawn from age groups older than myself, rather than coming across as a university ‘expert’, my position as a younger adult provided scope for participants to view me as someone to whom they could teach something. Furthermore, having grown up in Leeds, my accent was somewhat similar to that of research participants, assisting with putting them at ease and lessening the perceived division between us. Positionality was not, however, solely influential in this study on the quality of data obtained in interviews. In the observation stage, as a woman, I found it relatively easy to blend in in case study spaces, attracting limited attention in the course of data collection and arousing limited suspicion. This would, however, likely have been very different, and much more difficult, if I were male due to societal narratives around child protection.

3.3.3 Towards analytical integration

The topic of analytical integration has generated a large amount of debate in mixed methods research and, as Greene (2008:14) notes, while work has been conducted in this area, “this work has not yet cohered into a widely accepted framework or set of ideas”. As indicated in Section 3.3.2, it is relatively straightforward to ensure that data are relatable through the use of a sequential design. It is however more challenging to actually relate the different forms of data as part of the analytical process (Yin, 2006; Elwood, 2010). Both quantitative and

qualitative data have established routes of analysis and, as such, in many instances, the quest to look beyond these divisions has been challenging for mixed methods researchers.

Analytical integration is thought to result where there is “joint and interactive analysis of data represented in different forms (for example, numbers and words) during the course of the study’s data analysis” (Greene, 2008:14). This joint analysis can however occur at a range of points in the analytical process. It has been noted that the point of integration largely depends on the purpose of utilising mixed methods, for instance, where data are combined for triangulation purposes, analytically, data can and should only be integrated when inferences are drawn (Greene *et al.*, 1989). In this study, however, different forms of data were utilised to complement each other and it was therefore necessary to attempt to integrate them more thoroughly. This has been highlighted as a “more significant” research challenge (Greene, 2008:14), however, grounded theory was utilised here in an attempt to address this.

3.3.3.i The integrative potential of Grounded Theory

Grounded theory has become a popular approach to data analysis, since Glaser and Strauss’s seminal work, *‘The Discovery of Grounded Theory’* in 1967, by providing systematic guidelines for analysing qualitative data. While initially a strategy for qualitative data analysis, over time great diversity has emerged within the approach and this has enabled authors to acknowledge its analytical potential for quantitative and mixed methods studies as well (Charmaz, 2006; Strauss and Corbin, 1998). Grounded theorists advocate a ‘bottom up’ strategy of analysis, utilising empirical data to generate theory rather than testing hypotheses derived from established theories (Charmaz, 2006). The extent to which the researcher must keep their data and theory development separate from existing theoretical frameworks has, however, been a point of contention. In its initial iteration, grounded theory advocated that the literature review be postponed until after analysis, in order to prevent the influence of prior knowledge (Glaser and Strauss, 1967). While some, including Glaser (2002), continue to adopt this approach, many including Strauss have stressed that it is more important for grounded theorists to maintain ‘an open mind’ than ‘an empty head’ (Strauss and Corbin, 1998). With this, grounded theorists may start out with an understanding of existing theoretical frameworks (as in this study with the framework of value), however, categories utilised must remain contingent and open to change during the analytical process, as was the case here.

This openness to change was reflected in the iterative process of coding adopted in this study. Coding, together with forming part of the analysis, aids the organisation and reduction of data (Cope, 2010). Within grounded theory, after a short time in the field, researchers are first encouraged to conduct 'open coding' or 'memoing' to construct preliminary theoretical categories which explain their data. However, during the course of further data collection researchers ask questions of their data, changing these 'open codes', and forming them into more defined codes as ideas are winnowed down. This form of analysis was conducted throughout the data collection phase of this study. According to this analytical approach, data collection also continues until theoretical saturation is reached, when the addition of further data does not alter the theory generated (Cope, 2010; Glaser and Strauss, 1967) and this delineated the number of interviews conducted as part of this research. Of course, this was also limited to some extent by logistical and temporal constraints and interviews could not have carried on indefinitely.

Charmaz (2006:14) has emphasised that grounded theory relies on a foundation of 'rich data' which are "detailed, focused and full". She suggests that data can be classified as rich where they "reveal participants' views, feelings, intentions and actions as well as the contexts and structures of their lives" (Charmaz, 2006:14). Evidently, an emphasis on views and feelings requires the inclusion of in depth qualitative data and the transcription of approximately 12 hours of conversation from Stage III interviews therefore formed the basis of this analysis. Alternative forms of data such as behaviour maps, statistical outputs and photographs were also coded and utilised to inform other aspects of data richness. For instance, observational data collected in Stage I provided contextual information for qualitative responses and quantitative data derived from Stage II offered insights into the actions of individuals. Stage II questionnaires did, however, provide a further source of qualitative insight as qualitative questions and comments sections were coded in the same manner as interview responses.

The coding structure of this study was organised into People, Place and Theme codes. People and Place codes were primarily utilised to enhance comparability in analysis. All survey respondents were, for instance, given a people code which was their questionnaire number e.g. MRS001. This enabled data provided by a single individual but drawn from different sources (i.e. questionnaire and interview) to be brought together, allowing the consistency of opinion expressed by a single person to be ascertained and ensuring that the perspectives of interview participants were not 'double-counted'. Place nodes were created wherever

participants referenced a geographic entity and these enabled an understanding of the overall impression of a place to be ascertained. Here, invariably, 'Manston Park' and 'Pudsey Park' featured but other scales of space such as 'Roundhay Park' also had codes created. Other entities such as Crossgates, Pudsey, Leeds, Bradford and Yorkshire were also included.

The structure of theme codes derived in analysis is provided in Appendix 5. As noted above, this structure evolved over time, emerging out of a process of initial open coding and subsequent code refinement and amendment. This necessitated the movement of a number of different codes within the structure. 'Space', for instance, was initially coded under 'Facilities', however, once it became clear that participants attached significance to the opportunities it allowed for activity, rather than its mere presence, it was reclassified under affordances. As coding occurs over time, there is scope for confusion and consistency becomes paramount. Coding was therefore reviewed for consistency within individual transcripts but also across forms of data as new forms of data were added. Code descriptors represented a further strategy to enhance consistency. At first glance, codes such as 'Attraction' and 'Attractiveness' could seem similar, however, descriptors were used to note that 'Attraction' referred to the suggestion that the park could serve as an attraction, drawing people into the area, while 'Attractiveness' was noted as the appealing physical character of the space.

The themes that emerged form the basis for the analytical chapters that follow this. For the most part, participants expressed themselves succinctly in relation to points of interest and, given this, together with the applied nature of the study, the choice was made to present shorter sections of transcripts instead of more extended passages or vignettes of 'whole people' as this was felt to not impoverish the illustration of key points. The use of shorter quotations also facilitated the integration of methods during writing up as insights drawn from interviews were not privileged in terms of presentation over those drawn from other forms of data such as qualitative questionnaire sections.

It has been emphasised that the iterative process of coding and grounded theory analysis can be difficult to achieve with large quantities of data and mixed data sources can only make this more problematic. In this study, however, as discussed below, Computer Assisted Qualitative Data Analysis Software (CAQDAS) was utilised in order to facilitate this process and improve data management.

3.3.3.iii Using CAQDAS to bridge the analytic divide

The use of CAQDAS has increased markedly in recent years and it has been highlighted as extremely useful in the analysis of larger quantities of data, although uptake within human geography has been somewhat slower than in other disciplines (Peace and van Hoven, 2010). CAQDAS was initially developed as an antidote to laborious pen and paper coding and has enabled researchers to consider more data by allowing them to review material and amend codes more easily (Peace and van Hoven, 2010). While the data incorporated into this software have traditionally been qualitative in nature, in recent years, developments in certain programmes have enabled the examination of other forms of data and thus, while it has not been without its critics, its usefulness in integrating mixed method analysis has been stressed (Bazeley, 2003; 2006).

This study utilises NVivo 10 to facilitate analysis. While this programme represents the market leader amongst CAQDAS products, two of its features also make it particularly appropriate for use in this study. Firstly, NVivo, and its predecessor NUD.IST, have been highlighted as particularly compatible with a grounded theory approach as the programme has been designed to allow for the malleability of coding (van Hoven and Poelman, 2003). While concerns have been raised by some that these features overemphasise this analytical approach, dictating in some way the researcher's analytical path (Peace and van Hoven, 2010), where this analytical strategy has already been chosen, the use of software designed for this purpose can only be beneficial. Secondly, a range of data types and file formats can be imported into NVivo 10. Thus, while statistical analysis must be conducted in other programs (such as SPSS), the outputs of these analyses could be added into the NVivo project for this study as PDFs. While this scope for data type diversity represents a benefit for this study, it has not been viewed as entirely unproblematic. Some have argued, for instance, that with increasing amounts of data, there is a risk of impoverished results as the researcher is overburdened and achieves only a superficial coverage of the data (Peace and Van Hoven, 2010). CAQDAS is, however, only a tool and the quality of analysis obtained remains largely dependent on the analytical ability of the researcher. Furthermore, where, as in this study, a large amount of data is collected in a range of formats, the use of NVivo may improve the comparison of data, facilitating the iterative process (Peace and van Hoven, 2010).

As part of the inclusion of mixed data in CAQDAS analysis, data conversion often occurs with quantitative data being "qualitized" (Bazeley, 2003:70). However, in this study, it was

considered important maintain some quantitative analysis. Although analytical integration represents a key aim, it is also important to align this integration with the research questions at hand. Evidently, different levels and forms of data are required to answer different questions and, as such, integration may not always be desirable. In this study, for instance, it was necessary to draw on all forms of data in establishing limitations in the framework of value. However, where aspects of direct use were explored in questionnaire surveys or connections drawn between expressions of value within these datasets, quantitative techniques were employed.

3.4 Quantitative analysis techniques

In this study, two key forms of quantitative analysis, correlation coefficients and logistic regression, were conducted in SPSS. Amongst the data collected in resident surveys, a number of variables were ordinal in nature, including frequency of use, levels of agreement with Likert scale items and aspects of general information, such as age, residential permanency and household income. Relationships between these variables were therefore explored using correlation coefficients (with the results of these calculations reported in Chapter 4, 5 and 6). Spearman's rank correlation coefficient is a more commonplace measure of correlation, but, the accuracy of this calculation can be compromised when used with small datasets and where there is a relatively high incidence of tied ranks (Field, 2009). Kendall's tau correlation coefficient was therefore utilised instead throughout to minimise inaccuracies.

Binomial logistic regression analyses were conducted to explore the patterns of use of case study parks and uncover factors that made respondents more or less likely to be frequent users of these spaces, in different seasons. While multinomial analysis would have been preferable, due to dataset size, frequency of use was recoded in these analyses into a binary dependent variable (for more detail on this see Chapter 4). Independent variables included in these models were: Euclidean distance between case study space and home address, gender, age, whether or not an individual had or looked after children, access to a private garden and responses as to whether or not individuals carried out specific activities such as dog walking (more detail on these theoretically relevant variables are given in Table 4.2). Interaction effects may also have existed between some of these variables (for instance, age and whether individuals had or looked after children). However, dataset size also restricted the inclusion of these in calculations. In logistic regression, in contrast to linear regression, R^2 cannot be calculated and there has been some debate over the most appropriate alternative measure. SPSS offers two alternative measures of model fit, Cox and Snell R^2 and Nagelkerke R^2 . While these measures are calculated in different way, they essentially serve the same purpose indicating the proportion of variability within data explained by the model presented. For completeness, both of these measures are reported in logistic regression results tables in Chapter 4 and full analyses in Appendix 6.

3.5 Conclusion

This chapter has outlined in detail the methodological approach adopted in the study in investigating the non-economic value of the community park from an individual's perspective. From the outset, the diversity within the notion of value, highlighted in Chapter 2, was emphasised and the benefits of a mixed methods approach, featuring observation, social survey and interview methods, were thus underlined. In the course of this discussion, context was noted as a potential influence on accounts of value and, through a comparative case study methodology, measures were put in place to explore this at a range of scales. The choice of case study spaces located in the same urban area, Leeds, West Yorkshire, however, restricted the need to gather primary data on context beyond the neighbourhood scale.

In the course of the chapter, integration was also highlighted as an integral methodological consideration in mixed methods research. Here, it was emphasised that integration must be assured on three grounds and the strategies employed to ensure this were detailed. Firstly, critical realism was offered a potentially useful middle ground philosophical foundation for the practice of a combination of qualitative and quantitative techniques. Secondly, in practical terms, the sequential research design employed in this study was highlighted as assisting in making data more relatable between methods. Before, finally, grounded theory (together with the use of CAQDAS) was advocated as a useful analytical platform to bridge previously established analytical divides. The chapter did, however, take care to acknowledge the need to limit integration in some cases, and, thus, specific quantitative analyses, related to frequency of use data and Likert scale items were discussed. This was considered key in order to address research questions related to direct use. The results of attention to all research questions are presented in the three analytical chapters that follow.

Chapter 4: Valuing the Use of Community Parks

4.1 Introduction

Direct use has been viewed as an integral facet of the value of urban parks and, as noted in Chapter 2, existing research places great emphasis on the benefits individuals derive from recreational use (particularly in terms of health and community formation). However, contrary to this, analytical insights of this study cast the dominance of this form of value into doubt, suggesting an individual's direct use represents a much less pivotal facet of value. While it is acknowledged that direct use emerged during analysis as a focus for participants, this chapter details a series of limitations to this, highlighted by individuals, which serve to lessen its significance.

The following discussion identifies and explores two key aspects that constrain levels of direct use value. These relate to motivations for use and negativity, each of which is addressed in turn. The chapter begins by exploring the incidence of health and community benefits as motivating factors for direct use, stressing the contribution of these aforementioned aspects as relatively minimal. Instead, direct use is highlighted as having been associated by participants with specific user groups, such as dog owners and families, and it is stressed that, for many, the use of community parks is premised on a *need* rather than choice, with emphasis placed, here, on levels of accessibility and affordance. Negativity is then discussed as a further important omission from prior discussions of value, as fear and negative perceptions of facilities are noted as serving as important restrictions to direct use. Throughout this exposition of limiting factors, comparison is noted as integral to understanding, as, for a number of participants, these limitations constituted 'tipping points' for substituting the use of case study spaces for that of other leisure arenas.

4.2 Frequency of Use

As discussed in Chapter 3, case study spaces were selected on the basis of a divergence in use trends, evident in secondary data and, as shown in Figures 4.1 and 4.2, this distinction was reflected in the levels of use amongst participants, with lower levels of use more prevalent in Manston Park across both seasons. In both the Manston and Pudsey Park datasets, similar patterns of use could, however, be identified and responses appeared to group, with greater proportions of respondents using the park 'once or twice a week' or 'never'. Invariably in any discussion of the direct use value of an outdoor arena, seasonality must be taken into

consideration and, as might be expected, lower levels of use were more prevalent in winter across both parks. This is clear in both median and modal frequencies of use provided in Table 4.1.

The seasonal distinction in use evident may reflect changes in the affordances of case study spaces due to changes in weather and temperature, as the potential for certain activities, such as attending events or observing flowers, is likely to be markedly more limited during the winter months. Table 4.1 provides some evidence of this, exploring the number of activities selected by participants as rationales for use in each season. Here, across both case studies, the mean number of activities selected was greater during the summer months. This contrast may, however, have been greater had it not been for changes in question wording between pilot and second stage questionnaire distribution and measures of central tendency are therefore given for different survey stages in Table 4.1. During the pilot phase, respondents were asked to select only one answer and, as evident from the median and modal figures for this phase of collection (presented in Table 4.1), the majority adhered to this request. However, as indicated by measures of range, a small number of pilot participants did select more than one option and multiple selections were allowed for the 2nd stage of data collection. Where only second stage responses are considered, the seasonal difference in the mean number of activities selected is larger, representing 0.37 and 0.63 in Manston and Pudsey respectively, compared with 0.33 and 0.58 in the full dataset. Nevertheless, while seasonality clearly placed an important limitation on the use of case study spaces, other reasons were provided by participants to question the dominance of direct use as a facet of the importance of urban parks as a number of limitations to the drivers of direct use were identified and the impact of negative perceptions was explained. These are discussed in the sections that follow.

Figure 4.1 - Bar chart of summer frequency of use

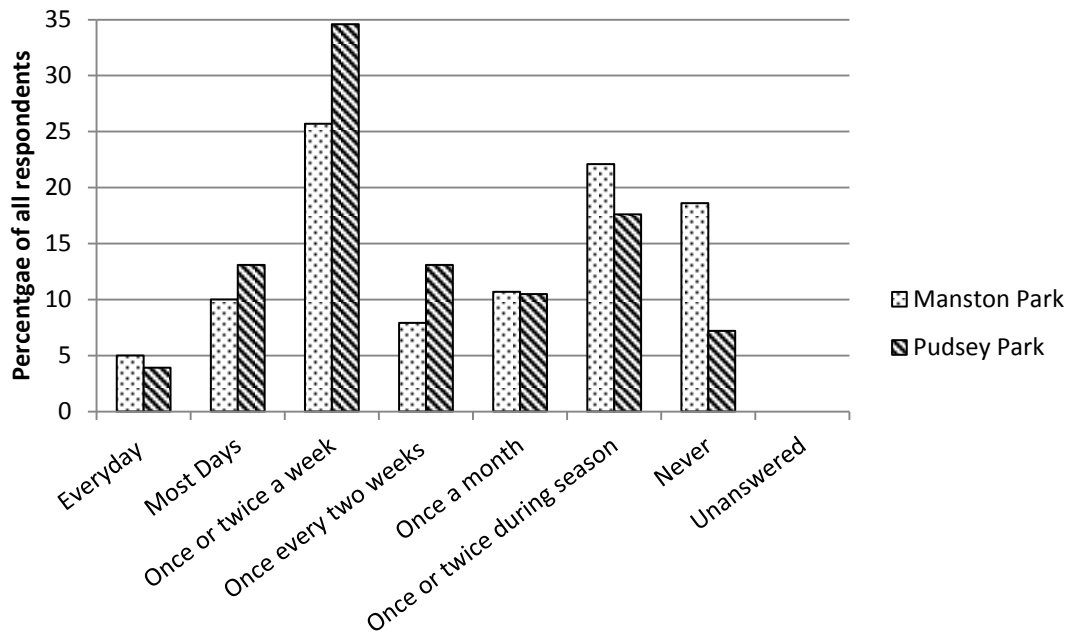
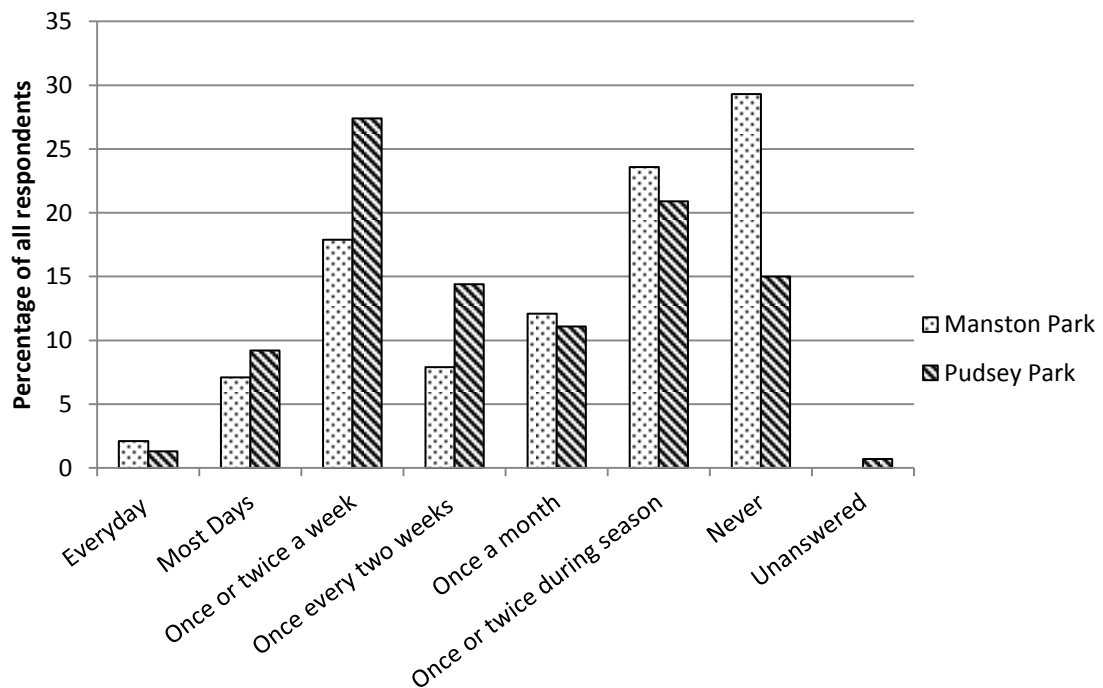


Fig 4.2 - Bar chart of winter frequency of use



4.3 Drivers of Direct Use

As emphasised in section 2.5, existing research has suggested that urban parks benefit users in a number of ways, with attention particularly paid to contributions to health and community formation and these elements have commonly been discussed as drivers for direct use. On this basis, one would have expected these aspects to feature heavily amongst motivators for resident use of case study spaces in this study. However, as detailed in the section that follows, attention to these was relatively scant, as accounts more readily attributed use to specific user groups, such as dog owners and families, thus considering it based on necessity rather than perceived benefit or choice.

4.3.1 Health and Community Benefits

Despite Schipperijn, Stisdotter *et al.*'s (2010a) suggestion that health has been rising on political agendas in relation to green space, there was limited evidence of this directly translating to lay perspectives as, references to this aspect were relatively sparse in participant accounts of direct use and its drivers. Instead, attention to this was largely indirect and explicit references to, for instance, physical activity were few and far between. As highlighted in Figures 4.3 (a and b) and 4.4 (a and b), the rationale for park use with the most explicit connection to health, 'to keep fit', was selected by a relatively small proportion of participants as a reason for them visiting case study spaces. This initial finding could be considered supportive of Hillsdon *et al.*'s (2006) suggestion that access to urban green space has limited connection to levels of physical activity. However, physical activity can be defined broadly and a number of other rationales, involving exercise, such as 'to go for a walk', 'to walk the dog' and 'to play sport or games', were indeed more commonly selected by participants. Evidently, these activities offer differential health benefits. Nevertheless, when taken together, these represent a high proportion of activity, with the potential to have contributed to improving participant health.

Table 4.1– Measures of central tendency for frequency of use and number of activities selected as a main reason to visit case study spaces

			Median		Mode		Mean		Range	
			Manston	Pudsey	Manston	Pudsey	Manston	Pudsey	Manston	Pudsey
Frequency of Use	Summer		Once a month	Once or twice a week	Once or twice a week	Once or twice a week				
	Winter		Once or twice during season	Once every two weeks	Never	Once or twice a week				
Number of Activities selected as reasons for visit	Summer	Full Dataset	2	3	1	1	2.79	3.18	9	11
		Pilot	1	1	1	1	1.56	1.60	6	11
		2 nd Stage	2	3	1	3	3.13	3.60	9	9
	Winter	Full Dataset	2	2	1	1	2.46	2.60	7	9
		Pilot	1	1	1	1	1.21	1.15	3	2
		2 nd Stage	2	3	2	2	2.76	2.97	7	9

N values of users – the first value given in brackets reflects the number of pilot responses while the second number denotes those collected in the 2nd stage of distribution

Manston Summer= 114 (25+89)

Manston Winter = 99 (19+80)

Pudsey Summer = 142 (30 + 112)

Pudsey Winter = 129 (26 +103)

In contrast to attention to physical activity, slightly more explicit mention was made of contributions to mental health, with 'for peace and quiet' and 'to relax and think' featuring more prominently as motivations for use. These aspects were not however as dominant as might have been expected, representing, for the most part, between the seventh and eleventh most popular activities (see Figures 4.3 (a and b) and 4.4a). The only exception to this was in Figure 4.4b where 'For peace and quiet' was selected as the fifth most popular reason for visiting Pudsey Park in the winter. The gap between the proportion of respondents selecting this answer (17.8%) and the fourth most popular answer 'to entertain children' (35.7%) was, however, marked. Nevertheless, the selection of peace and relaxation as rationales for use is supportive of connections drawn by authors such as Grahn and Stigsdotter (2003) between urban park use and stress relief. This would also suggest that, in contrast to Hitchings (2010) claims (mentioned in section 2.5.1.i), individuals remain sensitised to the pleasures of nature, in accordance with Burgess *et al.*'s (1988) claims.

In relation to community formation, the most explicit potential rationale for use provided in questionnaires was 'to meet friends' and, as with 'to keep fit', this was relatively poorly represented amongst participant responses (see Figures 4.3 (a and b) and 4.4. (a and b)). This is perhaps unsurprising as it was noted many years ago, by authors such as Bradley and Millward (1986), that the passive roles of green spaces were more important than those which were social. The wording of the question from which these data were derived may, however, also have served to limit the level of sociality expressed. In this question, participants were asked to state the *main* reason for visiting case study spaces, but, as mentioned in Chapter 2 (section 2.5.2.iii), authors, such as Kuo *et al.* (1998), Coley *et al.* (1997) and Sullivan *et al.* (2004), have stressed that most interactions in urban green spaces (and particularly those integral for community formation) are often informal and casual in nature. Thus, while this social aspect may not have served as the primary rationale for visits, this does not preclude any contribution to community. Furthermore, the level of sociality provided by an activity is somewhat difficult to delineate and a number of activities listed such as 'to go for a walk' or 'to walk the dog' may have been carried out with others. Moreover, given their engagement with others, rationales such as 'to entertain children', which featured highly in responses, could also be seen as social, although questions can be raised as to whether activities which strengthen familial bonds can be thought of as contributing to improving community.

Figure 4.3a - Bar chart of the proportion of users who selected reasons for visiting Manston Park (Summer)

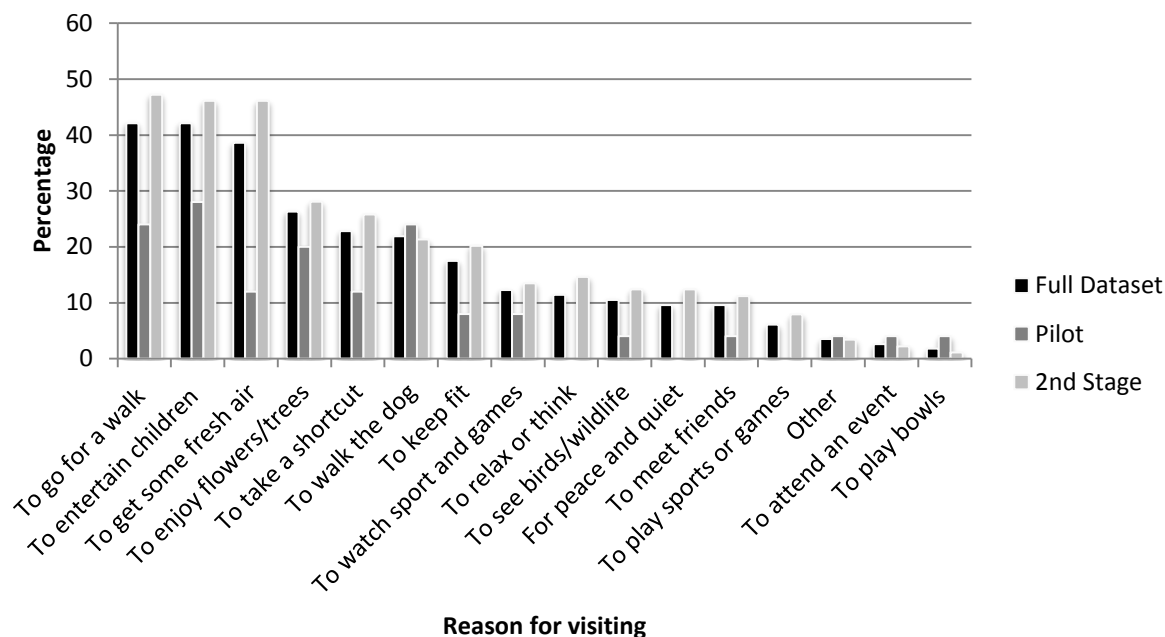
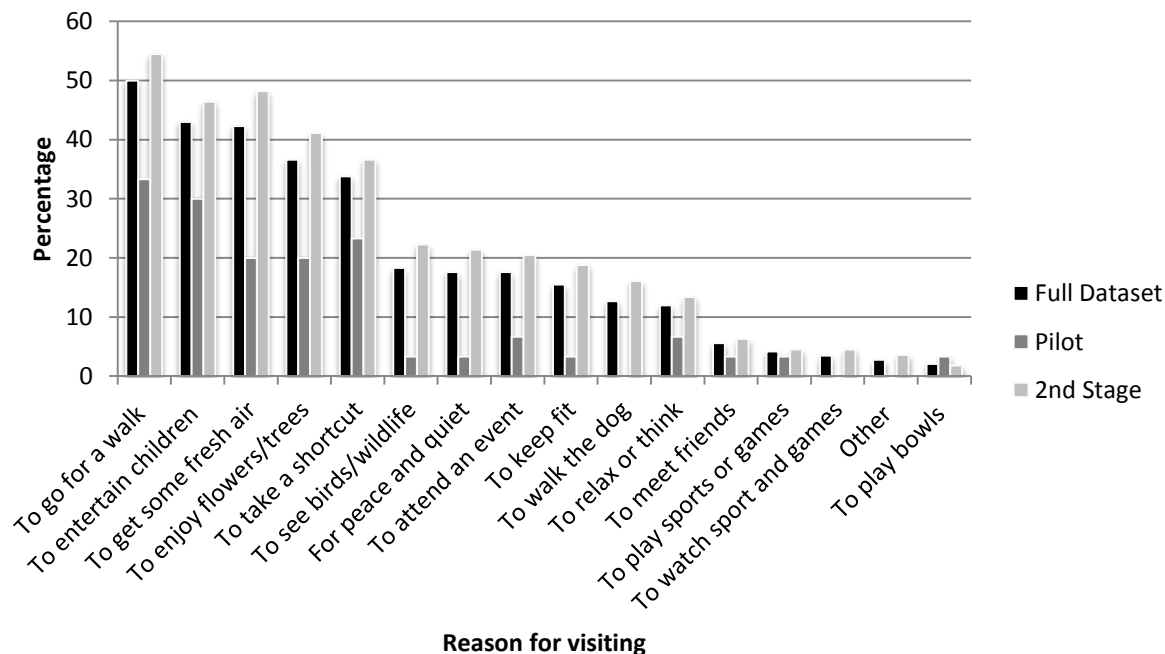


Figure 4.3b - Bar chart of the proportion of users who selected reasons for visiting Pudsey Park (Summer)



NOTE: For these questions, participants were able to select as many as activities as applied

Fig. 4.4a - Bar chart of the proportion of users who selected reasons for visiting Manston Park (Winter)

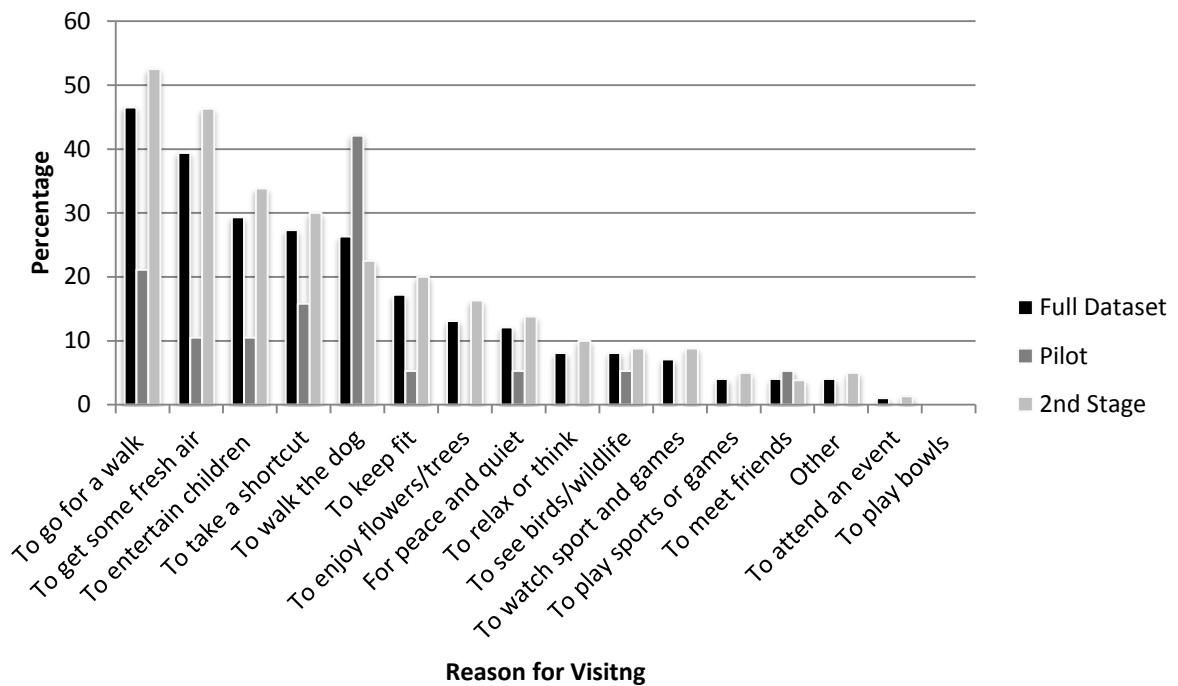
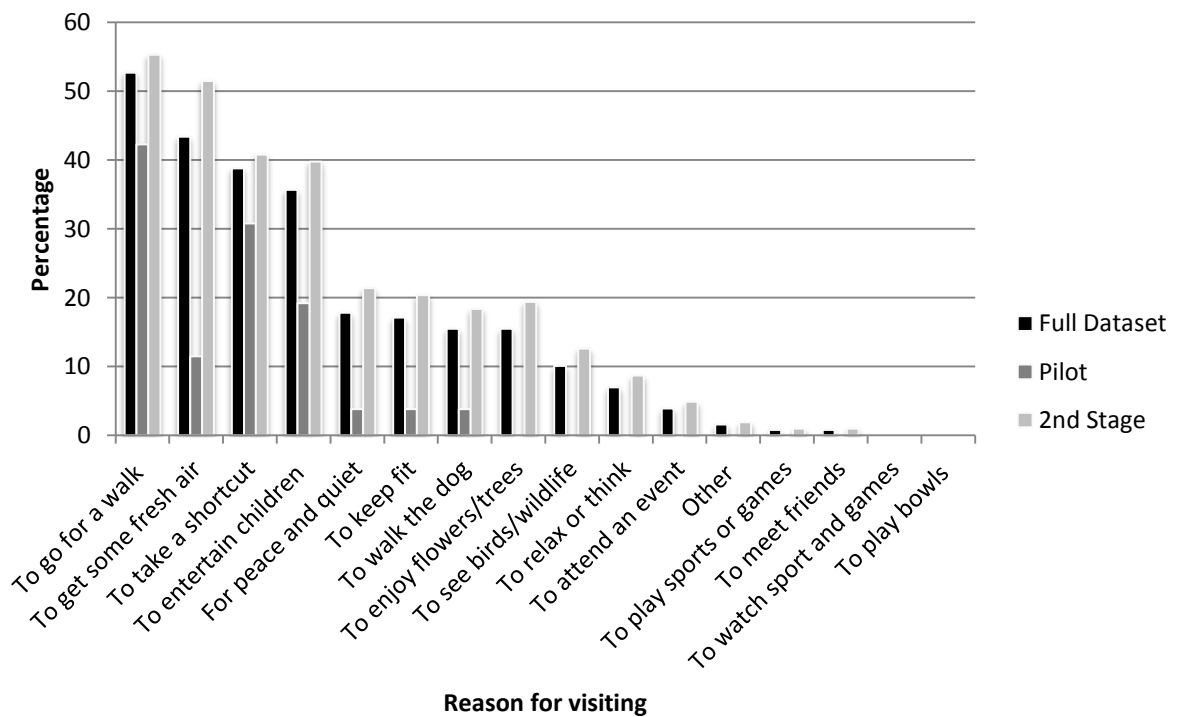


Fig. 4.4b - Bar chart of the proportion of users who selected reasons for visiting Pudsey Park (Winter)



NOTE: For these questions, participants were able to select as many as activities as applied

4.3.2 Users as Members of a 'Sizeable Minority'

As noted above, in contrast to existing literature, the benefits of the use of case study spaces were not noted as widespread. Instead, there was reason to question the assumed dominance of direct use value as, for the majority of participants, this use was associated with particular user groups rather than the wider population. Across both case studies, as highlighted by Excerpt 4.1, participant accounts drew attention to the importance of use for a 'sizeable minority'. For the most part, emphasis was placed on certain age groups, specifically Children, Teenagers and the Elderly, and those in particular personal contexts, such as dog owners, those without private transport and those without a garden. It was, however, necessary to explore how accurately these perceptions reflected the users of case study spaces and binomial logistic regression analysis was therefore employed to explore the incidence of these groups amongst frequent users. In spite of good response rates, datasets obtained remained relatively small in size (with 140 and 153 representing n values in relation Manston Park and Pudsey Park respectively) and thus, while multinomial analysis would have been preferable, only binomial analysis was supported.

Excerpt 4.1

"for a lot of people, particularly if you're either very young or elderly, or you don't have the money to run a car, or you don't wish to run a car... then you know, you're reliant on local amenities like that ... also if you've not got much time... you need something local, and I think, when you add up all of those groups.. I think that's quite a big... I wouldn't say it's a majority of the population, but it's certainly, I would guess, a sizeable minority who rely on that, and yeah, if you include families with young children you've got a very large number of people"

Barry, 35-44, Pudsey

Regression analyses explored how readily variables associated with key user groups explained frequency of use. Variables included in analysis were those aspects seen as drivers of use by participants. As noted in Table 4.2, these included age, access to a garden and whether participants used the park for dog-walking. The number of activities included in analyses was relatively limited. While 'to go for a walk' represented a commonly selected activity among questionnaire respondents, and could thus have feasibly featured in analysis, those who used the park explicitly for walking were not highlighted by participants as a key user group. Instead, in line with literature presented in section 2.5.2.i, the importance of accessibility for those without transport and the ability to walk to a park were stressed. Distance was therefore

included as a predictor. 'To walk the dog' featured in analysis as a proxy for dog ownership as this was not asked explicitly during data collection. 'To watch sports' and 'to attend events' were also included in models as an addition, where possible, as these represented specific events which were seen to draw people en masse to case study spaces at regular intervals.

In the first instance, this analysis was conducted to explore use during the summer season as this represented the peak time for recreation in case study spaces. However, as already noted, seasonality was very influential on levels of use, and the same analysis was therefore also conducted for winter use frequencies. In recoding of the frequency of use variable into two categories (frequent and infrequent users), a number of potential permutations were available, but, care was taken to identify the most appropriate division, with variable recoding guided by a natural break in the data which was common across both seasons (see in Figures 4.1 and 4.2). Frequent users were, thus, defined as those who made use of case study spaces at least once a week. As highlighted in Table 4.2, in some instances, variables had to be excluded where there was limited diversity in responses, as was the case, for example, with access to a private garden in the Manston Park dataset. Beta values and their significance for summer analysis are given in Table 4.3. These results for winter use are presented in Table 4.4. Complete tables for these analyses are provided in Appendix 6.

There was some difficulty in exploring the incidence of all groups mentioned as key users, with those without gardens, those without private transport and teenagers presenting particular problems. As highlighted in Table 4.2, while participants were asked whether they had access to a private garden, almost universal access (99.3%) prevented the inclusion of this variable as a predictor in the Manston Park model. Clearly, this level of access would not be ubiquitous to all urban areas and, authors such as Kuo *et al.* (1998) have stressed the particular contribution of greenery in urban public housing where levels are minimal. Access to a private garden was not, however, found to be a significant predictor in the Pudsey Park dataset, where access was somewhat lower. Given this study's focus on adult perspectives, a further group that it was difficult to explore the incidence of was teenagers. Teenagers were not, however, entirely excluded from attention as postal samples included those aged 18 and 19 and, as mentioned in Chapter 3, amongst interview participants, efforts were made to include the perspectives of these youngest adults. Nevertheless, teenagers aged between 18 and 19 are likely to have very different financial and practical constraints than those aged 13-17 which may well impact their accounts of the value of leisure resources. The final potential user group which could not

readily be explored was those without access to private transport as no question was included in resident surveys to ask this. As highlighted above, however, walking had been emphasised as the primary method of access for parks and an alternative accessibility-related variable, walking distance, could be included in regression analyses.

In spite of the limitations and difficulties discussed above, from the logistic regression analyses, in accordance with participant perceptions, it was possible to find support for the incidence of several frequent user groups. For instance, in line with user groups identified in qualitative data, dog-walkers were found to be a significantly (99% Manston and 95% Pudsey) more likely to be frequent users of both case study spaces. During the summer months, those who used the park to walk the dog were found to be 4.5 times more likely to be frequent users of Pudsey Park than those who did not and for Manston Park this figure rose to a factor of 6.5. In the winter months, this relationship was even more pronounced for Manston Park where those who used the park for dog walking were 32 times more likely to be frequent users. Contrary to perceptions, however, 'age' was not found to be a significant predictor in either dataset during either season, indicating that elderly people were not significantly more likely to be frequent users. The variable 'children' was found to be a significant (99%) predictor in the Manston Park dataset across both seasons, adding credence to the suggestion that children form a key user group, as adults who looked after children were markedly more likely to be frequent users. This relationship was not, however, found to be significant in the Pudsey Park dataset in either season.

Case studies also showed some differences in terms of the significance of 'distance' as a predictor of frequency of use. This variable was found to be significant (95%) in the Manston Park dataset across both seasons meaning those who lived closer to the park were significantly more likely to use it more than once a week. As highlighted in Tables 4.3 and 4.4, however, in the Pudsey Park dataset this was not the case. While, here, the same relationship was evident across both seasons, it only represented a significant predictor (99%) of winter use. It was however fairly close to significance in predicting summer frequency of use with a p-value of 0.067 (see Table 4.3). Case studies further diverged in terms of the influence of the 'Employment status' variable. In Pudsey, those in employment were found to be significantly (95%) more likely to be infrequent users of the community park. While this relationship was not significant in the Manston Park dataset, as demonstrated in Table 4.3, a similar

relationship was evident, with those in employment more likely to be infrequent users of the space than retired individuals.

While, as highlighted in Chapter 3 (section 3.4), some concern has been raised as to the reliability of R^2 values in logistic regression analyses, these serve as a further indication that the degree of association between user groups and use diverged between case study spaces, with use more closely affiliated to specific user groups in the Manston Park dataset where more variation was explained by predictors. As noted in Table 4.3, predictors explained 28.8% of variability in summer use in the Manston Park dataset; however, this was reduced to 15.4% of variability in the Pudsey Park dataset. This distinction was echoed in models of winter use (see Table 4.4), with predictors accounting for 36.8% of the variability in frequency of use in Manston Park and only 18.1% in Pudsey. This latter figure was, however, a rise compared to the summer statistic and thus could indicate a closer association of use to user groups in this season.

In the analyses, discussed above, no significant relationship was identified between gender and frequency of use. This may seem counterintuitive given that use for the entertainment of children was a common response and it might be assumed that traditional gender roles would drive frequent use by women. However, as highlighted in Table 4.5, while female frequent users visited Pudsey Park more often 'to entertain children' than their male counterparts, levels of selection were largely comparable between genders in the Manston Park dataset. This similarity could highlight changes to gendered care roles with men taking on more childcare responsibilities. This was supported where levels of employment were explored as more male frequent users in the Manston Park dataset were economically inactive (59.3%) compared to those in Pudsey (51.2%), suggesting stay-at-home fathers could represent a large proportion of male frequent users. However, many of these users were retired and the results above could thus also reflect alternative childcare arrangements with grandparents. The importance of cross-generational inclusion within families was nevertheless stressed in several contexts in the course of the study and this is thus explored more fully in section 6.4.1.

Where genders diverged in terms of activities, this largely revolved around sport. Here, male respondents were more likely to visit the park frequently to both play and watch sport, particularly in the Manston Park dataset. Male frequent users were also more likely to visit case study spaces 'to get some fresh air'. In contrast, female frequent users visited more regularly 'to enjoy flowers/trees' and 'for peace and quiet' across both parks. Social interaction

also appeared to serve as larger driver of frequent use amongst women as in both cases more female participants who used the park frequently did so 'to meet friends'.

Table 4.2 – Summary of variables included in logistic regression analyses			
		Manston	Pudsey
		%	%
BACKGROUND VARIABLES			
Gender	Female	53.6	51.0
	Male	46.4	49.0
Age	18-34	16.4	15.7
	35-44	11.4	19.0
	45-54	9.3	13.1
	55-64	20.0	18.3
	65+	32.9	33.3
	Unanswered	0.0	0.7
Children	Yes	33.6	28.6
	No	65.0	60.7
	Unanswered	1.4	0.7
Employment Status	Employed F/T	32.1	37.3
	Employed P/T	14.3	12.4
	Retired	15.7	15.0
	Other	37.1	35.3
	Unanswered	0.7	0.0
<i>Access to Private Garden [P]</i>	Yes	99.3	89.5
	No	0.0	9.8
	Unanswered	0.7	0.7
ACTIVITIES IN SUMMER			
Dog Walking	Selected	17.9	11.8
	Not Selected	82.1	88.2
<i>Watch Sports [M]</i>	Selected	10.0	3.3
	Not Selected	90.0	96.7
<i>Attend Event [P]</i>	Selected	2.1	16.3
	Not Selected	97.9	83.7
ACTIVITIES IN WINTER			
Dog Walking	Selected	18.6	13.1
	Not Selected	81.4	86.9
Watch Sports	Selected	5.0	0
	Not Selected	95.0	100
Attend Event	Selected	0.7	3.3
	Not Selected	99.3	96.7
NOTE: Variables listed in bold are include in logistic regression models for both parks. Variables listed in bold italics are included in models for one case study, indicted by a [P] for that related to Pudsey Park and [M] for that relating to Manston Park.			

Table 4.3 – Results of binomial logistic regression analyses exploring factors that made respondents more likely to be frequent (1) versus infrequent (0) summer users

	Manston		Pudsey	
Variable	Exp (B)	Sig.	Exp (B)	Sig.
Shortest distance from pedestrian access point	0.997	0.010**	0.998	0.067
Gender (ref – Female)	0.986	0.977	1.804	0.128
Age (ref – 65+)				
18-34	2.136	0.467	2.683	0.424
35-44	1.049	0.967	4.491	0.229
45-54	1.093	0.935	5.736	0.172
55-64	2.952	0.172	6.631	0.092
Employment Status (ref – Retired)				
Employed F/T	0.188	0.080	0.075	0.031**
Employed P/T	0.174	0.091	0.119	0.068
Other	0.207	0.095	0.160	0.128
Children (ref – No)	5.932	0.001***	2.077	0.086
Access to Garden (ref – Yes)			2.362	0.175
Dog Walking (ref – Not Selected)	6.536	0.003***	4.594	0.017**
Watch Sports (ref – Not Selected)	2.492	0.219		
Attend Events (ref – Not Selected)			1.048	0.927
Constant	1.744	0.424	1.632	0.365
N	137		151	
Cox & Snell R Squared	0.296		0.176	
Nagelkerke R Squared	0.399		0.235	
Log pseudolikelihood	137.219 (improvement of 48.116)		179.688 (Improvement of 29.318)	
	(Initial value=185.335)		(Initial value = 209.006)	
Note: *** = p<0.01, ** = p<0.05				

Table 4.4 - Results of binomial logistic regression analyses exploring factors that made respondents more likely to be frequent (1) versus infrequent (0) winter users				
	Manston		Pudsey	
Variable	Exp (B)	Sig.	Exp (B)	Sig.
Shortest distance from pedestrian access point	0.997	0.040**	0.998	0.004***
Gender (ref – Female)	0.600	0.396	0.721	1.152
Age (ref – 65+)				
18-34	0.333	0.348	0.429	0.404
35-44	0.077	0.094	0.680	0.707
45-54	0.112	0.100	1.019	0.985
55-64	1.025	0.977	1.651	0.521
Employment Status (ref – Retired)				
Employed F/T	0.744	0.784	0.362	0.264
Employed P/T	0.770	0.818	0.414	0.324
Other	0.955	0.964	0.718	0.715
Children (ref – No)	5.014	0.009***	1.234	0.621
Access to Garden (ref – Yes)			1.772	0.354
Dog Walking (ref – Not Selected)	32.685	0.001***	3.694	0.023**
Constant	0.957	0.957	2.346	0.104
N	137		150	
Cox & Snell R Squared	0.372		0.186	
Nagelkerke R Squared	0.540		0.252	
Log pseudolikelihood	96.194 (Improvement of 63.639)		169.328 (Improvement of 30.842)	
	(Initial value=159.833)		(Initial value=200.170)	
Note: *** = p<0.01, ** = p<0.05				

Table 4.5 - Percentage of frequent female and male users that selected reasons for summer use				
	Manston Park dataset		Pudsey Park dataset	
	Female	Male	Female	Male
N	30	27	38	41
To go for a walk	43.3	44.4	42.1	56.1
To walk the dog	40.0	29.6	18.4	17.1
To entertain children	46.7	48.1	55.3	39.0
To play sports or games	6.7	11.1	5.3	7.3
To attend an event	3.3	3.7	26.3	12.2
To watch sports or games	3.3	25.9	2.6	7.3
To relax or think	10.0	25.9	21.1	14.6
For peace and quiet	16.7	7.4	23.7	17.1
To enjoy flowers/trees	33.3	29.6	52.6	43.9
To see birds and wildlife	16.7	18.5	23.7	19.5
To get some fresh air	43.3	48.1	36.8	58.5
To keep fit	13.3	33.3	26.3	19.5
To take a shortcut	23.3	7.4	34.2	36.6
To meet friends	20.0	14.8	10.5	2.4
To play bowls	-	7.4	2.6	4.9
Other	6.7	3.7	2.6	7.3

4.3.3 Using Community Parks out of 'Need'

All specified user groups were associated with more limited leisure opportunities and, despite differences in the incidence of user groups between case studies, across both community parks use was discussed as being motivated by need rather than choice, with resources seen as offering something unavailable to individuals through other means. These accounts of need centred on two key aspects: accessibility and the opportunities offered for activity (affordance). This is perhaps unsurprising because, as highlighted in Chapter 2, both have been raised as influential on use in existing literature. Nevertheless, in accounts, many participants drew active comparisons on these bases with other leisure arenas, such as larger urban parks and private gardens. These elements are explored in turn below.

4.3.3i A 'Need' for Accessibility

Accessibility was highlighted as one of the main drivers for the use of community parks and was heavily associated with the user groups noted above. For some groups, accessibility was discussed in a broad sense, for instance, in relation to young people (see Excerpt 4.2), where the general accessibility of case study spaces was associated with providing a space for those with nowhere to go.

Excerpt 4.2

"they have to have somewhere to go to, you know, 'cause there isn't anywhere for them to go. I don't think so, there's no facilities for that age group, so there has to be a bit of err give and take I suppose for these younger people,"

Teresa, 55-64, Manston

However, for the most part, in accordance with Kazmierczak and James' (2007:354) discussion of the rarity of "free and accessible" public amenities, this aspect was discussed in a more detailed manner, with emphasis placed on two facets: proximity and cost. Amongst participants, these elements also formed key bases for comparison between community parks and other leisure spaces with respondents highlighting both of these as impediments to the substitution of community park use with that of other facilities.

Proximity

Proximity to home was stressed as a crucial driver of the use of case study spaces. As noted in section 2.4.2.i, a raft of research (including Coles and Bussey (2000) and Ward Thompson

(2002)) has identified those who live closer to urban green spaces as more frequent users of these spaces and, in accordance with this, as discussed in section 4.3.2, this was reflected amongst users in this study. However, when explored qualitatively, the rationale behind this relationship appeared to diversify, as the proximity of community parks to residences was seen to meet two different needs: enhancing both the convenience of use and the potential for spontaneity. These aspects were stressed to a different extent by different user groups and are considered in turn below.

CONVENIENCE AND WALKABILITY

Participant accounts placed great weight on the importance of convenience, or walkability in promoting the use of community parks and 'convenience' was highlighted as one of the aspects most liked about both case study parks (see Figures 4.5a and 4.5b). This aspect was considered particularly important for "those without transport" (MRS242), as a lack of private transport was thought to limit the opportunity to make use of other leisure facilities further afield. However, it should be stressed that locality can only be considered more significant for those without transport where the substitutability in value between different leisure resources is relatively complete, and as noted Chapter 2 (section 2.5.2.iv), the extent of this substitution can be contested. Nevertheless, for participants, such as Ryan (see Excerpt 4.3), the fact that his local community park was walkable was a key factor in its use as he emphasised Manston Park as crucial for those without a car, given a lack of public transport to other larger parks in Leeds.

Excerpt 4.3

If you don't drive, again it's close, you wouldn't be going, you can catch a bus but there isn't really a bus from here to Temple Newsam and there definitely isn't a bus from 'ere to Roundhay Park so.. there's no transport links to the other parks and this one's, like I say, it's very close

Ryan, 25-34, Manston

Walkability was also emphasised as particularly important for older residents who were also perceived to have more limited scope to use leisure facilities further from home. Convenience was thus considered as a key driver for use amongst this group, with case study spaces seen as opportunities for older individuals "to exercise and socialise" (MRS182) close to their homes. However, as noted above elderly residents were not markedly more likely to be frequent users and diverse attitudes to use were evident amongst older residents themselves. While many

acknowledged the benefit of these arenas for use by some older people, in accordance with Bjerke *et al*'s (2006) suggestion that ageing placed limits on their personal mobility, the importance of these resources was played down by older elderly residents as it was stressed that their mobility had been impaired by frailty and other health concerns (see Excerpt 4.4).

Excerpt 4.4

"Age restricts freedom of movement and mobility to enjoy these facilities and amenities now, but feel they are a valuable source of recreation and freedom for a great part of the community especially the young."

Male, 65+, Manston

This suggestion that need was diminished amongst older elderly residents due to mobility concerns was further supported by quantitative data as correlation coefficients (given in Table 4.6) indicated that in the Pudsey Park dataset, amongst those age 65 and over, those who were older were significantly (95%) more likely be infrequent users. Although not significant, the same relationship was also evident in the Manston Park dataset, suggesting that the perception of community parks as key for all elderly residents is perhaps an overgeneralisation.

Table 4.6 –Kendall's tau correlation coefficients exploring the relationship between age and frequency of use amongst those aged over 65 in second stage resident questionnaire distribution

	N	Kendall's tau	Sig.
<i>Manston Park dataset</i>			
Summer Use	37	0.193	0.092
Winter Use	37	0.205	0.079
<i>Pudsey Park dataset</i>			
Summer Use	41	0.237	0.039**
Winter Use	41	0.258	0.028**
[NOTE: *** = p<0.01; **=p<0.05]			

Nevertheless, the need for convenience was not solely attributed to user groups with physical restrictions on their mobility and lifestyle factors were also highlighted and necessitating more proximate leisure facilities. This factor was noted as important for dog owners, for instance, with community parks highlighted as providing a useful place "if you just wanna take your dog for a quick walk in the morning" (Barry, 35-44, Pudsey). However, convenience was particularly

emphasised as a factor which encouraged parents to use case study spaces, with respondents noting that the ability to travel further for leisure is often restricted on starting a family (see Excerpt 4.5).

Excerpt 4.5

“as a sort of youngish couple without children there wasn’t so much need to use it ‘cause we were a bit more mobile, so we could go, say up to the Dales, you know there’s no real need to just go to the park”

Barry, 35-44, Pudsey

Figure 4.5a – Word cloud of most-liked aspects of Manston Park

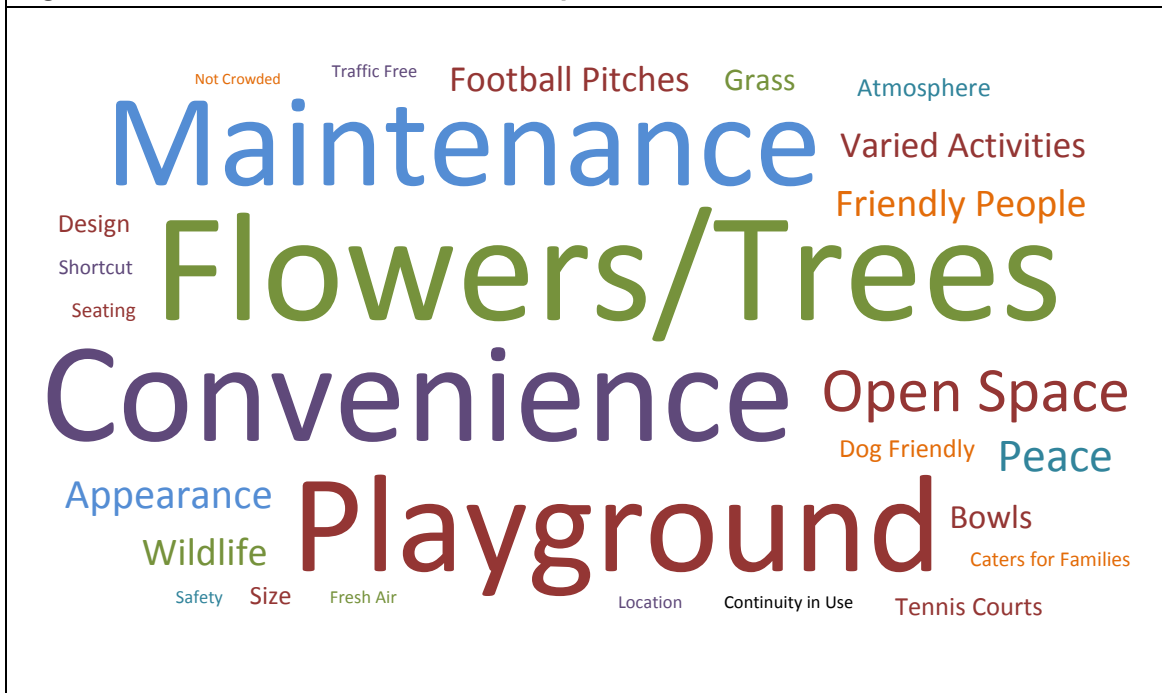
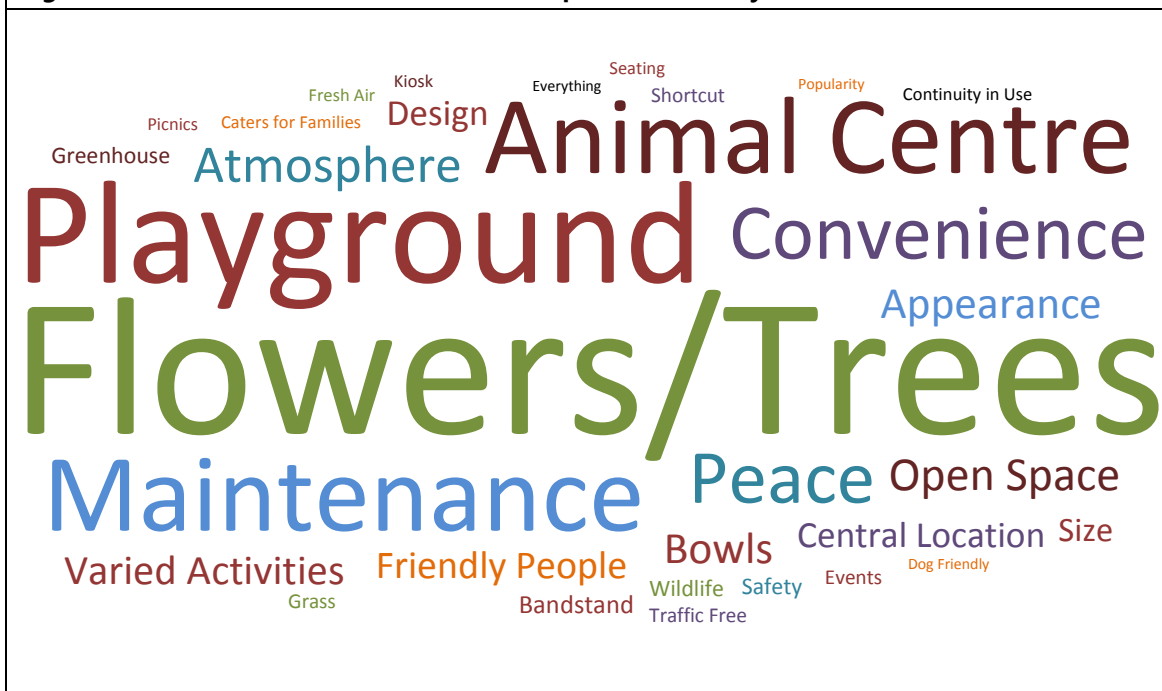


Figure 4.5b – Word cloud of most-liked aspects of Pudsey Park



NOTE: Font size reflects the number of mentions made of each aspect. An indicative key is provided below:

Key: 5, 20, 50

SPONTANEITY

Walkability was not, the only element gained from proximity and a second 'need' that the proximity was deemed to fulfil was related to spontaneity in use. While this aspect has not been readily addressed in literature to date, this represented a further aspect emphasised as crucial for families with small children. This element was, however, also more readily acknowledged as a driver for use amongst the wider population. In the discussion of spontaneity, participants readily drew comparisons between case study parks and larger green spaces in Leeds, with many emphasising the planning necessary for visiting parks further afield. For residents such as James (see Excerpt 4.6) this represented a distinction between community parks and "destination parks" with emphasis placed on community parks as being preferable for shorter visits.

Excerpt 4.6

"You know, it's got different uses.[...] Temple Newsam an' Roundhay are what you would probly class as 'destination parks' you would set off in your car an' you'd go for a few hours. Manston Park is here an' you'd use it for half an hour, an hour... an' it's for locals ... I used to do a lot o' work for breweries an' you 'ad two types of pubs, you 'ad a local pub which people just went in for a drink an' meet their mates an' everythin'[...] an' then you've got destination pubs where people would actually travel to, for an afternoon or an evenin' out."

James, 55-64, Manston

It was also clear, however, that other aspects of larger parks were also considered in deciding the overall importance attached to proximity. For many, as highlighted by Excerpt 4.7, the proximity of community park spaces also engendered a sense of ownership which set these resources apart from larger spaces. One interviewee from the Manston Park case study emphasised, for instance, that while Temple Newsam was beautiful, the locality of Manston Park made it "a bit of Crossgates" (Mavis, 85+, Manston).

Excerpt 4.7

"I think because Pudsey is on us doorstep it feels more... a nicer place to be, probably 'cause it's our park"

Pamela, 55-64, Pudsey

Several participants such as Emma (see Excerpt 4.8) also traded off this benefit of proximity with elements of affordance such as appearance. Affordance represented the second focus for participant narratives of need and thus is returned to in section 4.3.3.ii.

Excerpt 4.8

“Temple Newsam’s not somewhere I’d go for...well I suppose it’s prettier but it’s not somewhere like just on a spur of the moment we wouldn’t go to the park at Roundhay or Temple Newsam... ‘cause you’d have to... get there.”

Emma, 18-24, Manston

Cost

The second facet of accessibility raised by participants was cost of use, as community parks were highlighted as one of few leisure resources with no entrance charge. While, as demonstrated in Table 4.7, no significant relationship was found between household income and frequency of use, household income is not always indicative of disposable income and community parks were emphasised as “a low cost way for people to spend their leisure time” (PRS125). In spite of a diversity of incomes amongst participants in both case study area, references to the importance of cost were more prevalent in relation to Manston Park. Furthermore, as highlighted by Excerpt 4.9, in this case study, greater connection was drawn to the current economic climate. Nevertheless, cost did also feature as a driver of use in accounts from Pudsey residents

Table 4.7– Kendall’s tau correlation coefficients exploring the relationship between frequency of use and household income			
	N	Kendall’s τ	Sig.
Manston Park dataset			
<i>Summer Use</i>	109	0.078	0.154
<i>Winter Use</i>	109	0.012	0.437
Pudsey Park dataset			
<i>Summer Use</i>	110	0.040	0.297
<i>Winter Use</i>	109	0.045	0.274
[NOTE: *** = $p < 0.01$; ** = $p < 0.05$]			

Excerpt 4.9

“They are a valuable asset to any area where people can entertain young children, teenagers can have a kick around playing football etc., the elderly can enjoy the open spaces and importantly for many in this day and age there is no cost involved for anyone using this amenity which is an important factor.”

Female, 65-74, Manston

Across both case studies, where raised, (as demonstrated in Excerpts 4.10 and 4.11), cost was seen as a particularly pertinent for families. While many of the user groups mentioned were associated with tight financial circumstances, it was evident that those with children were perceived to benefit greatest from the lack of an entry fee, in part, perhaps due to a requirement to make frequent use of leisure facilities to ‘keep children entertained’.

Excerpt 4.10

“I love to take younger members of my family and know they will enjoy it and take their families. Having a local park means we don’t need money to go spend the day out doing something different”

Female, 18-24, Manston

In some cases, this was expressed by parents themselves and comparisons were drawn to other children’s play facilities that charge for use, as in Excerpt 4.11.

Excerpt 4.11

“I think it’s important for children, parents, for families. Somewhere to go, you don’t ‘ave to pay. These days people don’t ‘ave the money ... you go to the Wacky Warehouses an’ the soft play centres an’ they’re so expensive now, it’s just ‘avin’ the money to do those”

Amy, 25-34, Pudsey

Spatial comparisons on cost grounds were not, however, restricted to other play facilities as comparisons were also made by parents and grandparents between different scales of park. Here, however, cost comparisons were largely based on the cost incurred during park use and a more limited scope for refreshments in community parks was highlighted as reducing these financial implications for families. As highlighted in Excerpt 4.12, for instance, this aspect was discussed as leaving no scope for pestering to make incidental purchases. A greater tendency towards picnicking in smaller-scale spaces was also mentioned as enabling families to further reduce costs.

Excerpt 4.12

"I've been to Roundhay an odd time, yeah, it's huge, yes there's a, you can go and have a meal but [...] I think if you're takin' a couple of kids then it's more expensive. Plus the icecream van's there, so that's an icecream as well whereas Pudsey you can go and it doesn't cost you anythin' and they can 'ave a brilliant day an' like I say a lot of people take picnics"

Pamela, 55-64, Pudsey

4.3.3.ii A 'Need' for Particular Functional Features

The second aspect of 'need', discussed by participants as motivating the use of community parks, related to the functional features of case study spaces. The need expressed for particular opportunities for activity has clear connections to theories of perception related to affordance theory. As noted in section 2.5.1.i, drawing on the work of Gibson (1979), authors such as Chemero (2003) and Heft (2010) have highlighted that people perceived their environments in a relational and active sense rather than as purely visual stimuli. As Heft (2010:20) has suggested affordances are "all about action" and, in line with this, participant accounts suggest that opportunities for action form key drivers of direct use value. There were several incidences, for instance, in both datasets, where individuals made no use of their community park because they saw the space was seen as offering no benefit to them. User groups' need for a particular affordance can therefore be thought to drive use, where activities are not readily carried out in other leisure arenas. For some, this affordance need was met by particular facilities, such as play facilities, and playgrounds were represented one of the key aspects most liked in both case study spaces (see Figure 4.5a and 4.5b). However, for most part, where use was discussed as premised on a need for a particular affordance, this discussion was more diffuse, as participants stressed the potential offered by the open space and nature present in the community parks in question. Each of these elements is discussed in turn below.

Open Space

Open space was viewed as a key characteristic of community parks in both case studies and, as highlighted in Figures 4.5a and 4.5b, this feature figured relatively highly amongst aspects most liked. This sense of openness was, however, noted as particularly necessary for certain user groups identified in section 4.3. Space was, for instance, considered especially crucial for dog owners enabling them to take their pets on a "good walk" (Katherine, 75-84, Pudsey) as

they were able to let their dog off the lead. Open space was also viewed as a particularly pivotal feature for children. The focus of attention on activities for children and young people is perhaps unsurprising given the important variability in affordance identified for these age groups by researchers such as Maikenen and Tyrvaïnen (2008). Nevertheless, this aspect was discussed by many participants as crucial for giving youngsters “space to run” (MRS043) and thus enabling a sense of freedom and allowing them to play. As noted in Chapter 2, this connection has also been underlined by affordance researchers such as Heft (2010) noting that, for children, open space does not merely offer them the potential to run but “entices” them to do so. This element of enticement was clear in discussion of the need for open space as it was closely associated with a sense of freedom, in line with Tuan’s (1977) conceptual understanding of place. As with aspects of accessibility, the influence of this facet of affordance on promoting play was assessed through comparison with other leisure arenas and open space was discussed as particularly promoting use for ball games which could not be accommodated in private gardens (as highlighted in Excerpt 4.13).

Excerpt 4.13

“we moved here ‘cause we had 3 young boys who were too big to play football in the garden and they needed somewhere to go. They needed to let off steam”

Jane, 45-54, Manston

Participant comparisons with other public areas also contributed to a sense of open space being important for play. As highlighted by Excerpt 4.14, for instance, the open space in community parks was also associated with greater levels of safety as these spaces were emphasised as being “traffic free”. It should be noted, however, that community parks were not invariably considered safer than other public arenas and a number of other safety concerns, such as antisocial behaviour, were also raised, which are discussed in section 4.5. Nevertheless, the distance from traffic that open space provided in case study parks was discussed as a key driver of their use for play.

Excerpt 4.14

Manston Park is a really important resource for the people of Crossgates, providing a safe environment for children of all ages to enjoy in open space during 'down' time with family/friends

Female, 25-34, Manston

Nature

The second aspect of affordance stressed as promoting the use of community parks was the greenery present in these spaces and 'Flowers and Trees' featured as a further aspect of case study spaces most liked by respondents (see Figures 4.5a and 4.5b). Contact with nature was identified as a driver for use amongst both key user groups and the wider population as, in line with literature, this was commonly associated by participants with improved wellbeing (see Excerpt 4.15).

Excerpt 4.15

"Everyone needs time outside and away from hussle and bussle or noise from roads etc. a local park is very easy to get this peace and quiet we all need from time to time."

Female, 45-54, Manston

As highlighted in Excerpt 4.16, in accordance with Tibbatts' (2002) understanding, for children, this contact with nature was associated with the identification of an educational 'need', with contact with nature making young people "more respectful" of their environment.

Excerpt 4.16

"at least it gets them into somewhere where it's nature-driven, it's green, it's nice an' hopefully with 'avin' the park, these future adults will become better adults, more respectful of what's around them, more nature-loving because of the park"

David, 55-64, Pudsey

In spite of this acknowledgement of the general importance of contact with nature, the need for nature was most readily expressed as a driver of use for those without private gardens. However, as highlighted in section 4.3, this relationship was not found to hold up on statistical exploration in the Pudsey Park dataset. Questions can therefore be raised as to the level of substitution available between private gardens and public parks. As highlighted in Chapter 2 (section 2.5.2.iv), authors such as Barbosa *et al.* (2007) have suggested that substitution of these resources can be questioned on social grounds. However, for participants, this

incomplete substitution extended to nature. For participants, the comparative quality of community parks and private gardens became the deciding factor for whether this served as a driver of use, rather than purely the presence of nature. For Emma, for instance, in Excerpt 4.17, the presence of natural features such as grass was considered pivotal in determining use due to a lack of this in her own private space.

Excerpt 4.17

"I don't have much of a garden and I don't really, there's no grass and there's nothing for them to play on and I don't like to leave them to play out there so we go to the park and we say we're goin' on an adventure."

Emma, 18-24, Manston

However, for others such as Neville (see Excerpt 4.18), who had a greater diversity of nature in their own private garden, contact with nature could not serve as a driver for use.

Excerpt 4.18

I have no need... I have my own park. Err.. I've a nice secluded private area. Nice lawns down there, private, good access, switch at the back of me puts a little fountain on in the...things here. Err the dickie birds come in droves. They're there now... one is anyway

Neville, 75-84, Pudsey

4.4 The Influence of Negativity on Use

As the above discussion emphasises, the use of community parks was deemed by participants to derive largely from the interplay between needs for accessibility and the scope for certain activities (affordance). However, negative experiences and perceptions placed further limits on the direct use value derived from case study spaces. The potential for negative forms of value was highlighted in Chapter 2 (section 2.6.1), where, having drawn connections to the concept of 'place', the suggestion was made that previous value frameworks, such as that by Choumert and Salanié (2008), offered only a partial, positive view of importance. As demonstrated in Figures 4.6a and 4.6b, within the data collected for this study, specific issues raised coalesced in 2 key areas: 'Teenagers and antisocial behaviour (ASB)' and 'Dogs and Dog Fouling'. Negative perceptions of these aspects played a key role in defining people's understanding of the usability of these spaces and, thus, in determining their tendency towards substitution.

For the most part, concerns around ASB and dogs only led individuals to place limits on their use behaviour but, where their impacts were most extreme, these issues led individuals to not make use of case study spaces at all. One might expect individuals who were able to list a *greater number* of dislikes to be the least frequent users of case study spaces. However, as noted in Table 4.8, on exploration of this relationship, the only significant correlation (95%) evident was negative indicating that, those who made greater use of Manston Park, had listed more aspects that they did not like. This may, at first, seem counterintuitive. However, more frequent visitors may have had a better frame of reference for this question, being able to more readily draw concerns from own experience. Rather than being based on the accumulation of concerns, qualitative accounts suggested that substitution of use occurred where specific concerns became of a certain magnitude or reached a certain threshold, limiting affordance physically or altering the atmosphere of the space and promoting a sense of uneasiness. These two scenarios are discussed in turn below.

Table 4.8 – Kendall’s tau correlation coefficients exploring the relationship between frequency of use and the number of dislikes listed				
Variable 1	Variable 2	N	Coefficient	Sig
<i>Manston Park dataset</i>				
Summer Use	No of Dislikes (exc. Zero)	101	-0.186	0.027**
Winter Use	No of Dislikes (exc. Zero)	101	-0.116	0.170
<i>Pudsey Park dataset</i>				
Summer Use	No of Dislikes (exc. Zero)	116	-0.026	0.742
Winter Use	No of Dislikes (exc. Zero)	115	-0.054	0.490
[NOTE: *** = $p < 0.01$, ** = $p < 0.05$]				

4.4.1 Physical affordance

Dog fouling in particular was noted as a key issue affecting physical affordance. This aspect led many participants to place spatial limits on their use of case study spaces, with several respondents, for instance, feeling unable to make use of grassed expanses. Across both case studies, this issue was considered particularly restricting for playing ball games, such as football, and for young children looking to play on these areas. As such, where participants felt the space no longer catered for their desired activity, as in Excerpt 4.19, other arenas were utilised.

Excerpt 4.19

"I use Pudsey Park play area. If I want to play ball games/kick a ball I go elsewhere such as Kirkstall Abbey. I dare not play on the grass at Pudsey because it's always full of dog poo!"

Female, 35-44, Pudsey

The perceived inaccessibility of grassed areas was raised as particularly problematic at times of peak demand, such as during events. For instance, as noted in Excerpt 4.20, several participants raised this as an issue at brass band concerts in Pudsey Park, when an inadequate quantity of seating led to many visitors being forced to sit on the grass. However, here, substitution was not evident as this particular activity could not be engaged in elsewhere. Instead, data collected in the observation stage of the project suggested that this may not be a prevalent problem as individuals adapted to the situation. While the behaviour mapping of a brass band concert (see Figure 4.7) highlighted that many visitors were positioned on grassed areas, at the time of observation, many individuals brought picnic chairs with them and therefore did not sit directly on grassed areas.

Excerpt 4.20

Dogs running free and fouling in the park seriously spoils pleasant areas. [...] we love to listen to the bands but we would never risk sitting on the grass while they are playing!

Female, 55-64, Pudsey

Figure 4.6a Word cloud of least-liked aspects of Manston Park



Figure 4.6b Word cloud of least-liked aspects of Pudsey Park



NOTE: Font size in word clouds reflects the number of mentions made of each aspect. An indicative key is provided below:

Key: 5, 20, 50

4.4.2 Atmosphere

In contrast to the above discussion, in many instances, the use of an alternative leisure space was not premised on a physical limit to affordance. Instead, many participant accounts suggested that substitution of use was promoted where concerns compromised the sense of safety engendered by case study spaces. Teenagers and ASB were a focus for these sentiments amongst participants, with respondents suggesting that the presence of “rough looking” young people made the park “not the kind of place you want to hang around in” (PRS085). For some, less extreme aspects of avoidance were sufficient to mitigate this sense of threat. As highlighted by Excerpt 4.21, for instance, spatial avoidance was evident in relation to children’s playgrounds where young people were perceived to have appropriated these spaces.

Excerpt 4.21

“yobs drinking and swearing in the playground – spoils it for taking small children”

Female, 55-64, Manston

As highlighted by Kirsty, in Excerpt 4.22, some participants also responded to this perceived threat through temporal avoidance. The presence of teenagers was connected with the early evening and there was therefore evidence that, rather than limit their use completely, some participants elected to not make use of the spaces at this time of day. Clearly, however, this was a more problematic strategy for those who worked full-time. For some, diminished levels of lighting also worsened this sense of intimidation in winter months and, where this was the case, the desire to substitute the use of case study spaces with that of another leisure arena appeared enhanced. One participant suggested in relation to Manston Park, for instance, that they would rather “walk locally where there are less “youths”” (MRS110) in the winter.

Excerpt 4.22

“there’s a particular group of 10 youngish people [...] if you just like walking your dog or your kids round it spoils it a bit[...] there’s certain times of day where it’s worse, sort of teatime-ish so you can sort of avoid it if you want to”

Kirsty, 25-34, Pudsey

In some instances, a sense of intimidation or fear also led individuals to make use of more private arenas instead of case study spaces. As evident in Excerpt 4.23, this was particularly prevalent in relation to a fear of dogs, where individuals noted their own cynophobia or that of

their family necessitated the use of their street or private garden where this issue would not arise.

Excerpt 4.23

"I have two boys aged 7+9 - unfortunately they are both scared of dogs. When they were smaller we were in the park weekly but as this fear has developed our use of the park has dropped. They play out a lot and play football - but use the alley at the back of our street which is dog free."

Female, 45-54, Manston

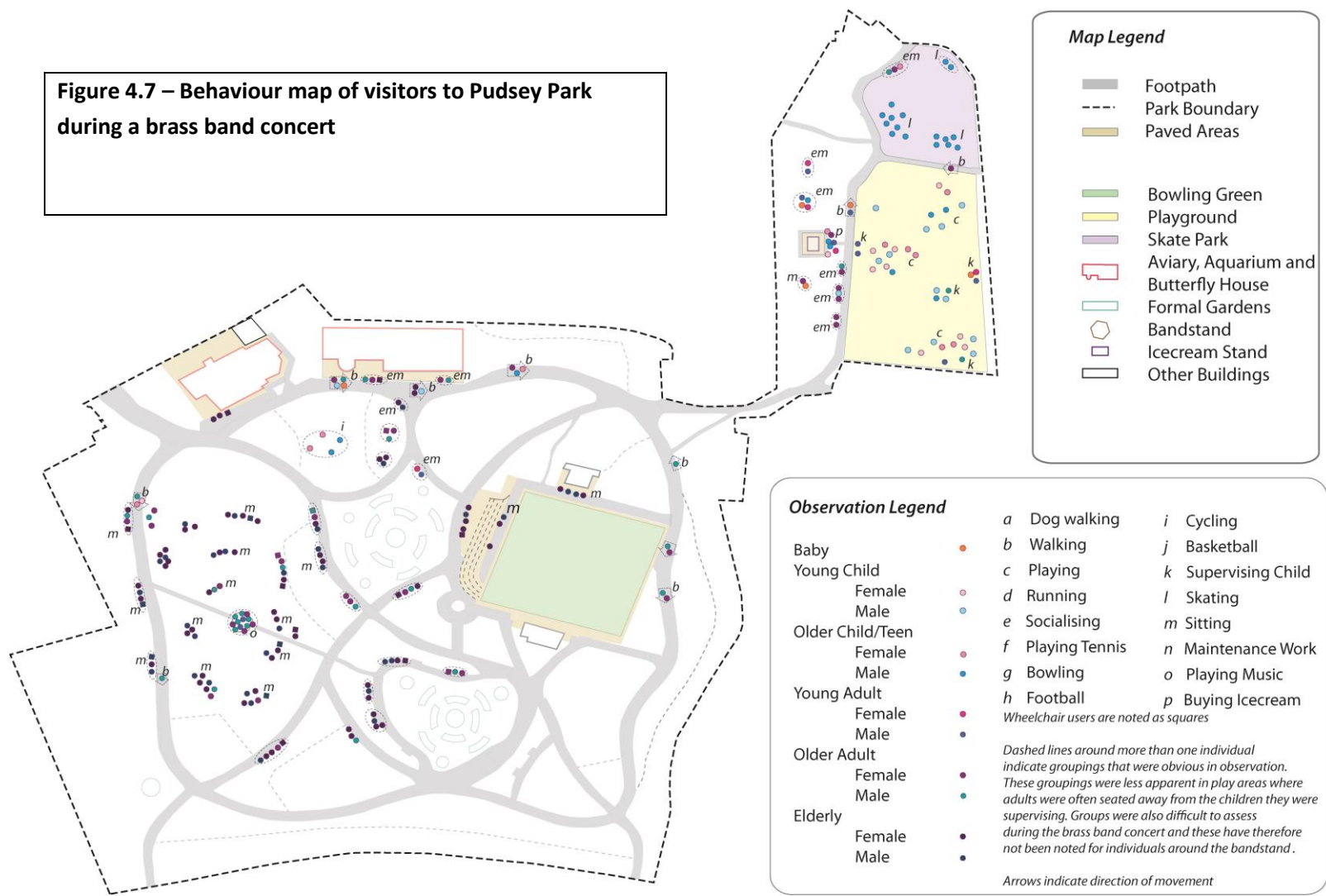
Nevertheless, in all accounts of substitution, a process of 'weighing up' was clear and, while thresholds of tolerance were evident, as noted in Excerpt 4.24, these negative aspects were evaluated by participants in conjunction with the aspects of accessibility and affordance, discussed above. Negativity can therefore be considered a further constraint on the direct use value derived from community parks. However, access to other leisure facilities is variable and substitution can only occur on this basis where direct use is derived out of desire rather than need. The green spaces presented by participants as alternatives to Manston Park and Pudsey Park, such as Temple Newsam and Roundhay Parks, were often more difficult to access and, thus, while, for those with access to private transport, concerns may drive the use of an alternative leisure space, for those with more restricted transport options, thresholds for negativity appeared higher.

Excerpt 4.24

"when it comes down to it you have a choice to make. Wouldn't you take a short drive but go to a place where it's patrolled over one that is nearer by that doesn't offer the same level of security?"

Richard, 35-44, Manston

Figure 4.7 – Behaviour map of visitors to Pudsey Park during a brass band concert



4.5 Conclusion

This chapter has provided a clear rationale to question the emphasis on direct use prevalent in existing conceptions of urban park value. Here, two aspects (drivers for use and negativity) have been stressed as significant limitations on the use of case study spaces. For the majority, the use of community parks was noted as premised on need rather than choice and thus, health and community benefits were much less prominent motivating factors than expected. Instead, use was associated with very specific user groups, such as dog owners and young families and, despite some incongruence between perceived and actual use for some of the groups identified, preceding analysis has lent some credence to these claims, denoting factors, such as distance and dog-walking, as highly significant predictors of more frequent use within case study datasets. In participant accounts, need was noted to relate to two main factors: accessibility and affordance, with discussions of accessibility placing emphasis on proximity and cost and references to affordance centred on the open space or natural aspects of case study spaces. Negative perceptions around dogs and antisocial behaviour were then stressed as further limits to use as the spatial and temporal avoidance employed by participants to combat these concerns was highlighted.

Throughout the above discussion, direct use value has also been highlighted as contextualised, with spatial comparison noted as playing an integral part in driving or impeding use. Here, it was highlighted, for instance, that the aspects of accessibility and affordance discussed above were readily assessed in comparative terms, with participants judging whether to use case study spaces on the basis of other leisure facilities available to them, such as larger parks or private gardens. Here, the significance of negativity, as a prior omission in discussions of value, came to the fore as negative elements were noted as representing important thresholds for substitution where aspects of affordance were undermined or a sense of safety was compromised. Taken together, the above discussions of need and spatial comparison clearly highlight the limits to direct use value, however, they also raise questions as to whether existing understandings of value are complete. There is little understanding, for instance, as to the temporal continuity of this aspect and how current levels of use may influence future patronisation of the spaces. Questions can further be raised as to how use connects to other values and whether limited use may alter perceptions of the usefulness of community parks and constrain levels of non-use values such as philanthropy. Temporal values and the connection between use and non-use values are explored in Chapters 5 and 6 respectively.

Chapter 5: Valuing Aspects of the Past

5.1 Introduction

The discussion of use in Chapter 4 raised questions as to the completeness of existing value frameworks. While present use (explored in the preceding chapter) certainly forms a part of the importance of park resources, use-related importance is not restricted to considerations of the present temporal dimension, and authors, such as Choumert and Salanié (2008), have emphasised the potential for future use to feature as part of value as a whole (see Table 2.1). However, despite a long-acknowledged relationship between individuals' memories and their attachment to place (see section 2.6.2), connections drawn between value and time have paid limited attention to the past. This aspect was, however, found to be widespread amongst participant accounts in the course of analysis and this chapter thus argues that this represents a key omission in value frameworks to date.

This discussion underlines the need to consider past-related values by presenting evidence for several forms of importance connected to this past temporal dimension. Using data drawn from resident questionnaire surveys and interviews, the chapter begins by identifying recollection and heritage as use and non-use values, akin to the future-related values of option and bequest (noted in Table 2.1). Two key factors that complicate this definition are then however discussed. Temporal comparison is first raised as a problematic factor. Through a discussion of nostalgia, the inherent comparative dimension of past accounts is shown to be highly influential on the current perceived value park resources, as it is noted, for instance, that positive memories do not inevitably have a positive effect on value. Following on from attention in Chapter 4, negativity is then raised as a second concern. Negative memories are demonstrated to influence present value both positively and negatively, with three negative comparative values, obsolescence, improvement and negative perpetuation defined.

5.2 The Use and Non-Use Value of the Past

The potential for past values was highlighted in Chapter 2 (section 2.6.2) in discussions of the connections between value and place. In line with values previously associated with the future, it is possible to distinguish use and non-use elements, based on whether individuals recount

their personal experiences (recollection) or discuss the past in more abstract terms, related to others rather than themselves (heritage) (see Table 5.1). Given this potential, Likert scale agreement items were included in resident questionnaires to examine the extent of these aspects of importance. These items form the starting point for the exploration of recollection and heritage values, which are addressed in turn below.

Table 5.1 –Amended urban green space value framework including proposed past values (adapted from Choumert and Salanié , 2008:336)		
Use values	Direct use	Recreational benefits including relaxation and exercise.
	Indirect use	The functions of green space that benefit individuals, including environmental benefits
	Option	Having the potential to use this space in the future
	Recollection	<i>The importance attached to a space because it reminds a person of something they did in the past</i>
Non-use values	Existence	The value attached to it just being there irrespective of any potential future use
	Philanthropy	The importance of a resource to benefit others
	Bequest	The importance of a resource for future generations
	Heritage	<i>The importance of a resource as a symbol of or connection to a previous time</i>

5.2.1 Recollection

Many people have personal experience of having used community parks in the past and recollection value was found to exist where people drew on these memories in their accounts of the current importance of these resources. It can thus be thought of as ‘the importance attached to a park because it reminds someone of something they have done in the past’. The potential for this form of value was first explored in resident questionnaires through Likert statement ‘I like to remember times I have used the park in the past’, with responses suggesting that memories may indeed constitute an important facet of value. As noted in Table 5.2, high levels of agreement were present in both case study areas, with 72 % and 74% either agreeing or strongly agreeing with this statement in the Manston Park and Pudsey Park datasets respectively. However, given that the statement addresses public parks in general,

from this, it is only possible to draw limited conclusions as to the dominance of this form of importance in relation to community parks specifically. This nevertheless demonstrates the capacity for this to feature in these scale-specific data and qualitative evidence, drawn from resident surveys and interviews reinforced the presence of this form of value at this smaller scale.

In interviews and qualitative questionnaire sections, several participants discussed the importance of case study parks by recounting personal memories of having used them in the past. In line with attention to children (already noted in Chapter 4), accounts often retained this focus, relating memories of participants' childhoods or childrearing. Timescales of memories did however vary between participants. For some older residents, as in Excerpt 5.1, memories were recounted from the relatively distant past, with individuals, such as Leonard reminiscing about visiting case study spaces over five decades ago.

Excerpt 5.1

"I remember fifty four years ago coming home from work and having my evening meal, taking my two sons and half-a-dozen of their friends to Manston Park and introducing them to the joy of playing cricket – such happy eventful days!"

Leonard, 85+, Manston

For others, however, time horizons were much shorter, focusing instead on the more recent past or integrating past experience, as in Excerpt 5.2, into a narrative explaining how the use of a case study space had evolved over time.

Excerpt 5.2

"I visited Pudsey Park frequently when I was young, I played there whilst growing up – then began taking my children there whilst they were growing up – I walk down there with my dogs or when walking through to the centre. It is a lovely, lovely park"

Female, 45-54, Pudsey

Evidently, recollection value is premised on reflection. It has been suggested by authors such as Rowles (1983) that ageing increases the propensity towards reflection, in part due to a greater scope for memories where more time has passed (see section 2.6.2). This raises the potential for this form of value to be overstated where the elderly are overrepresented in datasets (as was the case in this postal survey). Kendall's tau correlation coefficient was thus calculated to explore the relationship between age and level of agreement with the

recollection Likert statement. As highlighted in Table 5.3, however, no significant relationships were found where these variables were compared, suggesting that older respondents were not significantly more likely than younger individuals to place recollection value on parks in general. Qualitative data further supported this statement as, while memories were less readily offered by those in younger age groups, accounts of recollection were not restricted to older ages groups. Excerpt 5.3 provides a good example of this, with Emma, a young adult, noting memories of looking at flowers as a child as contributing directly to the importance she places on the space in the present.

Excerpt 5.3

“When I grew up opposite it, I knew spring was coming ‘cause ma mum used to take me to see the crocuses and stuff, across the front of the park, and I could always like, I looked out ma bedroom window and it was what I saw, so I love, I don’t know, I just love the park”
Emma, 18-24, Manston

Table 5.2 – Summary of levels of agreement to past-related Likert items				
			Manston Park dataset	Pudsey Park dataset
N			140	153
Value	Statement	Agreement Level	%	%
Recollection	‘I like to remember the times I have used the park in the past’	Strongly Agree	30.7	34.0
		Agree	41.4	39.9
		Neutral	22.9	22.2
		Disagree	2.9	3.3
		Strongly Disagree	0.7	-
		Unanswered	1.4	0.7
Heritage	‘Public parks remind me of previous eras’	Strongly Agree	29.3	35.9
		Agree	39.3	30.1
		Neutral	22.9	23.5
		Disagree	7.9	9.2
		Strongly Disagree	-	-
		Unanswered	0.7	1.3

Table 5.3 – Kendall's tau correlation coefficients exploring the relationship between past-related values, age and permanency				
Variable 1	Variable 2	N	Kendall's T	Sig
Manston Park dataset				
Recollection	Age (pilot)	138	-0.023	0.374
Recollection	Permanency (pilot)	138	-0.089	0.130
Heritage	Age (pilot)	139	-0.131	0.032**
Heritage	Permanency (pilot)	139	0.027	0.365
Pudsey Park dataset				
Recollection	Age (pilot)	151	-0.038	0.290
Recollection	Permanency (pilot)	150	-0.049	0.256
Heritage	Age (pilot)	150	-0.140	0.019**
Heritage	Permanency (pilot)	149	-0.084	0.129
NOTE: ***=p<0.01; **=p<0.05 Due to minor question changes between phases of questionnaire distribution, correlations were conducted on the basis of pilot phase age and permanency categorisations to enable the inclusion of all data in analysis				

Excerpt 5.3 also raises questions as to the connection between recollection value and permanency, or the duration of residence in an area, highlighting that, for Emma, meaning was accrued over time. Logically, one would expect, those who have lived in an area longer to have had greater potential for experience of a community park and thus, these individuals may attach more weight to their memories when considering its importance. However, when the relationship between permanency and recollection value was explored in resident survey datasets (see Table 5.3), no significant correlations were found. This may, in the first instance, seem counterintuitive. However, the reason for this became clear when this form of value was explored in qualitative accounts.

As previously mentioned, much of the recollection value attached to case study parks centred on experiences of childhood, however, many residents had not grown up in these neighbourhoods. As demonstrated in Excerpt 5.4, memories were therefore not restricted to those of prior use of the case study parks in particular and many participants attached importance to the community park in their current neighbourhood based on the fact they had made use of other green spaces in their past.

Excerpt 5.4

"I am 70 years old now but the park of my youth was East End Park, Leeds 9. It is still there and was a major feature of my life and my father's before me. Every child should have a similar space and environment"

Female, 65-74, Manston

Although, for some, as in Excerpt 5.5, accounts of importance were premised on memories of having carried out very specific activities, such as sports or games, in other arenas. Nevertheless, in line with Rishbeth and Finney's (2006) discussion of migrant perspectives on urban green space, it seems that for many individuals, features of case study community parks triggered individuals to draw similarities with other spaces they had used in the past.

Excerpt 5.5

"As a youngster myself and my friends spent many hours on our local park. Football in winter, cricket in summer. We used our own cricket equipment and if no goals were available in winter for our football we used our coats as goals. We simply made use of what we had."

Male, 75-84, Manston

5.2.2 Heritage

As noted above, less personal references to the past also featured in participant accounts of the importance of case study spaces and, here, heritage value was identified as a non-use counterpart to recollection value, where parks were discussed as symbols of or connections to previous times. Evidence of this form of value drew heavily on the position of many community parks as longstanding features of urban environments. When initially explored in resident surveys, heritage value was represented by the Likert statement 'public parks remind me of previous eras'. While characterised by greater diversity in opinion than other Likert scale items, a high level of agreement with this statement was, nevertheless, evident with 68% of respondents in the Manston Park dataset and 66% in the Pudsey Park dataset agreeing or strongly agreeing with this statement (see Table 5.2). In spite of this, as with recollection value, the conclusions that can be drawn from this at the community park scale are somewhat limited by the generality of the statement. Nonetheless, this level of agreement provides a clear rationale to explore the scope of this value in scale-specific accounts.

Among qualitative data, heritage value was indeed found to be present. However, it should be noted that it diverged in prevalence between case studies with this form of value much more commonly expressed to Pudsey Park. This perhaps because Pudsey is the more longstanding of the two case study spaces and features more traditional design aspects (see chapter 3 for more details). Nevertheless, across both case studies, heritage value was most readily identified in relation to the local community, although the specific character of this value varied slightly between case studies. In relation to Manston Park, as demonstrated by Excerpt 5.6, this form of value drew on the notion of this space being ‘handed down’ through people in the area.

Excerpt 5.6

“In my opinion, I think Manston Park to Crossgates is really really important. Just the fact that it’s used so much [...] and its history as well. It’s always been like used loads by everybody in the area”

Tim, 18-24, Manston

This aspect of heritage was also evident in Pudsey, however, an even clearer sense of the space being passed down was also conveyed, with participants explicitly referring to the spaces as a “link for generations” (PRS463) locally and as offering “a link to our ancestors” (PRS359). In Pudsey, a second aspect of community heritage was also evident as participants connected the community park with local identity. Some residents, for instance, as exemplified by Excerpt 5.7, connected the presence of the park to Pudsey’s position as a historic market town, suggesting that this arena held much of its remaining ‘charm’.

Excerpt 5.7

“There’s a sign down on the ring road that’s pointin’ up ‘ere, to ‘historic market town’, when you get ‘ere, it’s, there’s no charm left, until you go in the park”

Jean, 65-74, Pudsey

Finally, amongst Pudsey residents, some references were also made to heritage value in a broader societal sense, although these were not widespread. Here, for example, some referred to the park as contributing towards a “sense of history” (PRS353) and representing “part of our English heritage” (PRS336), perhaps again because of its more traditional design aspects.

Given the focus on community heritage outlined above, heritage value might be expected to have been more prevalent amongst those who had lived in an area longer. However, when this relationship was explored in resident survey datasets, no significant correlations were found

(see Table 5.3). A significant (95%) weak negative relationship was however identified between heritage value and age in the Pudsey Park dataset, indicating that those who were older were more likely to agree that public parks reminded them of previous eras. This connection to age was not however found to be significant in the Manston Park dataset. This may be because the aforementioned traditional design aspects in Pudsey Park are of particular salience for older people. Furthermore, these aspects, such as the bandstand, are used for events which attract older individuals.

Brass band concerts are, for instance, a common summer event and, it was seen throughout the observation stage of data collection that older people were the dominant age group in attendance. The popularity of this feature was also evident in questionnaire responses where the brass band and bandstand were discussed as elements that were most liked (see Figure 4.5b) and some suggested that this feature gave a “sense of tradition” (PRS353). This is not to say that heritage symbols were completely lacking in Manston Park as, in common with Pudsey Park, a traditional rose garden was present in the space. However, this symbol of heritage was viewed very differently and where it was commented on, it was spoken of in a much more disparaging way, as exemplified by Excerpt 5.8.

Excerpt 5.8

“yeah those rose beds I don’t know how long they’ve been there but, it, it is a long time [...] they’re old and they’re diseased now, you know”

Teresa, 55-64, Manston

The excerpt above also demonstrates the comparative nature of engaging with the past which complicates the definition of past-related values and is explored in detail below.

5.3 The comparative nature of past values

As noted in Chapter 2 (section 2.6.2), Lowenthal (1985) suggested that when we reflect on the past we do not view it in a neutral way. As events are remembered, he suggested they are always viewed through a lens of the present and, by extension, many individuals engage in an act of comparison. While the discussion of recollection and heritage values above situates past values within existing value frameworks and distinguishes single use and non-use aspects, the acknowledgement of this comparative element complicates this simple distinction.

Furthermore, as discussed in section 2.4, existing typologies centre on the positive aspects of

importance. Thus only instances where positive memories have a positive effect on the current value of a park could be incorporated into previous framings. However, this is not always the case and several instances were identified in data collected where the park in question was viewed as having worsened over time. Furthermore, participants did not always recall positive memories. A range of additional relative values were therefore identified in relation to the past. These are summarised in Table 5.4.

Table 5.4 – Summary table of past-related values taking into account the complicating factors of comparison and negativity			
		Impact on current value of resource	
		<i>Positive</i>	<i>Negative</i>
Sentiment of Memory	<i>Positive</i>	Recollection	Nostalgia
	<i>Negative</i>	Improvement	Negative Perpetuation
Non-use values		Heritage	Obsolescence

5.3.1 Nostalgia

Through the act of comparison, there were many instances where participants exhibited nostalgia, with positive memories having a detrimental effect on the present importance attached to case study parks. As noted above, memories recounted were often recollections from childhood and it has been suggested by some, such as Rowles (1983) that the environment experienced during childhood is always remembered as superior. While this was not always the case in this study, it was nevertheless possible to identify instances of this, where the memory of something someone had done in the past generated a sense of loss or a sense that the park had worsened over time. Qualitative evidence of this nostalgia value appeared to coalesce in both case studies around two key areas: facilities and supervision. These aspects are discussed in more detail below.

5.3.1.i Facilities

It has been suggested that the experiences of childhood are the most vivid sensory experiences (Tuan, 1977) and, by extension, it is perhaps no surprise that many of the most positive memories expressed by participants related to experiences of childhood play. However, this positivity appeared to leave great scope for nostalgia, revolving around a perceived loss or worsening in quality of certain play facilities. In some instances, accounts centred on those facilities that remained in the space, where ease of access was thought to have been compromised. In Pudsey Park, for example, this was demonstrated in relation to informal facilities such as the topography of the space, with participants such as Jean (see Excerpt 5.9) highlighting the fun that their children or grandchildren had had running around.

Excerpt 5.9

“there used to be a bank they’ve now put flowers on. How many hours did Anna an’ them run down, they’ve taken it away now, they’ve stopped the kids from rolling down this hill and it wa marvellous, [...], they’ve stopped it ‘ant they. But the kids loved it. They used to roll down an’ they’d spend hours.”

Jean, 65-74, Pudsey

A similar sentiment was also evident in relation to Manston Park when some respondents discussed how access to the Bowling Green had altered. As demonstrated in Excerpt 5.10, some participants recalled a time where this facility had been much more widely accessed, with necessary equipment available to hire.

Excerpt 5.10

“I lived in this area most of mi teenage life, so, that was my local park, so I’ve been going to that park since I was two, sort of thing [...] it’s great. Yeah, I mean , the facilities down there probably aren’t as good now as what they were then... [...] When I was little, I mean , if you wanted to go bowling, as long as you behaved yourself, you could hire the stuff and go bowling for about 3 p, three pence I should say... so that facility’s no longer there”

Shaun, 45-54, Manston

Nevertheless, for the majority, nostalgic accounts centred on the removal of play equipment because, as demonstrated in Excerpts 5.11 and 5.12, for some, this change in the space was seen to, in some sense, restrict the freedom of play. For Emma, for instance (see Excerpt 5.11), the fencing off of the play area in Manston Park had reduced the potential for enjoyment.

Excerpt 5.11

"When I was little the playground was a lot better than it was now. It was like a big stone hill with a slide erm... when you're little, it was really fun 'cause it was like a mountain to climb and now it's just, I don't know, it's all fenced off and really small an', it's not as fun as it wa' when I wa' little... "

Emma, 18-24, Manston

Spatial constraints were not, however, the only aspect identified as a restriction to the potential for fun in comparative accounts of case study spaces. Simon (Excerpt 5.12), for example, suggested that this was reduced in Pudsey Park by the removal of a particular piece of equipment due to health and safety concerns.

Excerpt 5.12

"We also had the steam roller [...] it had all the innards taken out so, when I were a child, you could clamber all over it. It also had the roof on... we used to jump off the roof [...] it also had big wheels on it, so you could slide off those, but you know, this was an age before health and safety went bananas and it was fantastic!"

Simon, 45-54, Pudsey

5.3.1.ii Supervision and Regulation

Despite the negative perception of regulation evident in Excerpt 5.12, in the majority of cases, references to supervision and regulation amongst participants also constituted forms of nostalgia as this aspect was seen to have worsened markedly over time (see Excerpts 5.13 and 5.14). Here, individuals often made reference to a time when park keepers were more commonplace, with many, as in Excerpt 5.13, lamenting a loss of authority and control with the loss of this figure.

Excerpt 5.13

From what I remember back in the days, when I wa' a lad,... they used to have a park keeper. That park keeper wa' God. [...] and you messed in 'is park at your peril. I think that's what's missing. [...] There's nobody there that'll turn round and say to t'kids 'You're messing with my park. Get out.' You know, they can't do that now"

Simon, 45-54, Pudsey

As highlighted in Excerpt 5.14, this focus for nostalgia is likely a response to perceived incivilities in the community parks in question. The emphasis on these aspects is perhaps unsurprising as antisocial behaviour, littering and the control of dogs were all viewed as key concerns in both case studies and, as noted in Chapter 4, these aspects continue to place limits on the use of these arenas.

Excerpt 5.14

"When I was younger there were park keepers on site during the day and you could book tennis courts. There was no antisocial behaviour as there was always someone to keep an eye on things"

Female, 45-54, Manston

An interesting aspect of nostalgic focus was, however, that, in contrast to references to play, these statements were not solely based on personal experience and instead, in some instances, based on the anecdotes of others. In Excerpt 5.15, for instance, Amy expressed nostalgia for a time when Pudsey Park was locked overnight based on a conversation she had had with an elderly neighbour.

Excerpt 5.15

It's just a shame that it's not.... Secure. D'ya know, like the older children, it used, the gates used to be locked years ago, ma neighbour over t'road she's 90 an' she said the gates used to be locked so nobody could enter it. Now it's open all night so you can imagine what the teenagers get up to in there an', d'ya know

Amy, 25-34, Pudsey

5.3.2 Viewing the past negatively

The recollection, heritage and nostalgia values, identified above, focus on occasions where the past was viewed in a positive light. However, in the course of analysis, it was also possible to identify several instances where individuals discussed the importance of case study parks by referring to the past and past experience in a negative manner. As highlighted in previous chapters, existing value frameworks leave no scope for this negativity. The act of comparison, discussed above, was also prevalent amongst negative accounts, with a differential impact on current value. In some cases prior negative experiences contributed positively to the importance currently attached to case study parks (improvement). However, there were also occasions where negative associations with the past carried over into present value (obsolescence and negative perpetuation). These different aspects are discussed in turn below.

5.3.2.i Improvement

In the course of analysis, several instances were found where participants noted an improvement in case study spaces over the course of their experience and, in doing so, made reference to several negative memories of them. However, because situations were perceived to have improved, these references were shown to have a positive impact on present value.

Across both case studies, accounts of improvement centred on three main areas. The first of these was maintenance standards. In discussion of improvements in maintenance, as demonstrated by Excerpts 5.16, reference was made to a previous period of disinvestment in the 1980s, referenced in Chapter 1, where standards were perceived as having declined.

Excerpt 5.16

"I don't know whether that's like an 80s thing [...]but I definitely don't think we used it as much as I use it with Katie, but then Pudsey Park was a bit rough back then."

Kirsty, 25-34 Pudsey

As highlighted by Excerpt 5.17, here, great emphasis was placed on the upkeep of facilities and planting which were thought to have become 'run down' during this time period and affected the atmosphere of the space in the past, with some suggesting local parks at that time were "a bit rough"(see Excerpt 5.16).

Excerpt 5.17

"it's... certainly, in recent years, I would say it's improved 'cause at one time it got really run down"

Shaun, 45-54, Manston

Connected to the discussion above, narratives of improvement also coalesced around antisocial behaviour, littering and dogs. This may seem counterintuitive given that, as highlighted in Chapter 4, these aspects remained matters of concern amongst questionnaire respondents and interview participants. However, these problems were highlighted as representing longstanding issues and participants were therefore able to identify several changes for the positive in both case study parks. Crime and antisocial behaviour was a particular area of emphasis in both spaces and these aspects were perceived as having become less extreme over time, with overt symbols of these incivilities, such as bin fires (Excerpt 5.18) and needles (Excerpt 5.19), becoming less prevalent (see Excerpts 5.18 and 5.19).

Excerpt 5.18

There was a phase where we'd have a group o' kids who always thought it wa' funny to light the bins. They've moved on. Nobody does that, not as much. I can't remember the last time I could smell a bin burning and I use that park nearly everyday... so... they've moved on. These other kids have moved in. They just hang around together... don't create that much fuss.

Simon, 45-54, Pudsey

Excerpt 5.19

"I remember several years ago goin' in with some grandchildren, [...] and there was a police officer there and he said they were patrolling it, because there had been so much trouble, and there was needles around at one time...But I think it, I think it is much better."

Ivy, 65-74, Manston

In both spaces accounts of improvement could also be identified where play equipment was described (see, for instance, Excerpt 5.20). This facility had been upgraded fairly recently in both case study spaces and thus, across both parks, for some, it signified a key aspect of visible change. For several respondents, alterations also represented key symbols of renovation and investment. The acknowledgement of improvement in relation to play equipment does, however, underline the comparison inherent in discussion of the past because, here, improvement is placed in direct opposition to accounts of nostalgia, discussed in section 5.3.1. Although discussions of improvement and nostalgia centred on the same facility, the perception of any changes were fundamentally opposed as individuals' prior experiences shaped their frame of reference, which, in turn, appeared to have altered the importance placed on this aspect of the case study space.

Excerpt 5.20

"the park was just a couple of swings and err a dodgy little roundabout [...] but now they've made it an actual park, they've put all sorts of little funky rides in for the kids and stuff and more swings and a new roundabout... so it 'as changed, obviously for the better"

Ryan, 25-34, Manston

Although memories of negative personal experiences were discussed most readily in relation to improvement, it is important to note that participants' negative memories did not solely constitute the basis for positive appraisals of case study parks. It was therefore possible to identify a number of occasions where negative references to the past were continued into current assessments of value. Although less prevalent than those discussed above, as with the positive values discussed in Section 5.2, accounts could be divided into those addressing others (or society in general) and those drawn from personal experience.

5.3.2.ii Obsolescence

Heritage value (discussed in section 5.2.2) represents the importance attached to a space because its traditional aspects are viewed as positive assets at the societal level, drawing connections to bygone eras. Invariably, however, instances were also identified in data

collected where longstanding design features were viewed less favourably and, in many cases, as obsolete. Accounts of obsolescence could be delineated where community parks were seen as old-fashioned and this narrative dominated particularly where leisure facilities in case study parks were seen as being out-of-step with modern society. Discussion of this comparative aspect was not, however, as widespread as those defined above. Nevertheless, as Excerpts 5.21 and 5.22 highlight, where it was noted, it was largely in connection to teenage leisure behaviour.

Teenagers were, for instance, highlighted as much less active than in times gone by and, thus, suggestions were made that the types of activities offered by case study spaces were no longer as desirable (see Excerpt 5.21).

Excerpt 5.21

"I think the way people use 'em has changed. I mean a lot of kids now are too busy playin' computer games aren't they? To be honest, I don't see as many people in it now as I used to do so I don't, I don't know. It's still good for sports I suppose but I don't know if it's bein' used like that, you know, a lot of kids I know now don't really leave the house... yeah... gaming geeks"

Liam, 18-24, Manston

As demonstrated by Excerpt 5.22, accounts of obsolescence were particularly evident in relation to Manston Park where facilities centred more closely on sport-related activity, such as football and tennis. This is perhaps unsurprising as these arenas are likely to have been impacted most by the more sedentary lifestyles referenced in these discussions.

Excerpt 5.22

"there aren't as many people that go there. [...]there is a, a missin' section of society... where, they get to a certain age and if they haven't really bothered with football, or they've grown out of it, the park doesn't mean a great deal to them. [...] But with the youngsters, they do grow away from it. They get their parents buy 'em one of these new-fangled what.., ipods or whatever and they go sit at 'ome and play all day, on a lovely sunny day, [...] I find that... sad really."

Christopher, 75-84, Manston

5.3.2.iii Negative Perpetuation

The final comparison identified in data was somewhat akin to recollection value however, in contrast to positive memories adding positively to the current value attributed to a space, here, negative memories detracted from it as they were assumed to have continued, or perpetuated, into the present. Although not widespread, these accounts were most prevalent

amongst infrequent users who appeared to have been dissuaded from using case study spaces in some way by a past experience and thus had few new points of reference. As Excerpts 5.23 and 5.24 demonstrate, areas of focus were similar to those of accounts of improvement, as discussion centred on the general upkeep or maintenance of spaces and issues of concern, such as dog fouling. However, in contrast to improvement, these problems were seen to have persisted over time.

Excerpt 5.23

“Dog foul’in’ is a bit of a problem because I seem to remember me an’ you goin’ out for a kick around an’ I was takin’ shots at ‘im in the goal an’ ‘e dived an’ ‘e got up an’ ‘e wa’ covered in dog muck. So, dog foul’in’ is a bit of a problem but obviously not if you’re playin’ on the tarmacky bit

James, 55-64, Manston

In some instances, as in Excerpt 5.24, participants even acknowledged that their frame of reference was outdated, but this did not appear to alter markedly the negative statements made regarding current conditions.

Excerpt 5.24

“some of it appears a little bit rundown but.. yeah.. [like what?]... well... from what I remember... I remember like the broken fences... I don’t know what it’s like now... broken fences like”

Liam, 18-24, Manston

In the course of analysis, this form of value appeared the least dominant of all comparative values. However, it has been noted previously in qualitative research that participants share negative experiences of place less readily than positive ones and, thus, there is the potential that the extent of both improvement and perpetuation values was, in some way, underestimated.

5.4 Conclusion

This chapter has presented a clear case to question the representativeness of existing typologies of the value of community parks, highlighting the attention to the past as a key omission in value frameworks to date. The above discussion has identified a series of past-related values, stressing that a notable part of current value is formed through personal

experience. Recollection and Heritage were, first, discussed as positive use and non-use past-related contributions to value. Building on the discussion of spatial comparison in Chapter 4, the temporal comparison inherent in accounts of the past was underlined as a complicating factor in the definition of past-related values. Here, a range of further relative values were identified. The first of these, nostalgia, centred on the negative present perception that can derive from positive past experiences. Drawing on the acknowledgement in Chapter 4 of the limiting effect of negativity on use, negative memories were then noted as a necessary consideration and three further relative values: improvement, obsolescence and negative perpetuation identified on the basis of negative accounts. Here, negativity was stressed as not solely undermining the current importance of community park spaces, with improvement value underlining the potential for positive contributions to present value drawn from negative previous experience.

In prior accounts and representations, forms of value identified have been treated as separate from each other. The comparative values identified in this chapter, however, serve to challenge these divisions, signifying clear connections between past and present importance. Questions can however be raised as to how readily past-related values may relate to accounts of future-related value and these temporal connections are thus explored in the chapter that follows. Temporal horizons are not, however, the only divisions present in understandings of value and while, here, the division between recollection and community and/or societal heritage appears to hold, it is unclear how representative this use/non-use division is in relation to other forms of value. Connections between values form the focus for Chapter 6.

Chapter 6: Exploring Connections between Values

6.1 Introduction

The notion of continuity between forms of value has been neglected in prior discussions of value with clear boundaries drawn between forms of importance. The identification of the comparative values: nostalgia, improvement, negative perpetuation and obsolescence, in the previous chapter, however, cast this clarity into doubt, identifying past perceptions as highly influential on the current importance attributed to case study spaces. This chapter interrogates the idea of connections between values more fully, questioning the validity of boundaries presented in existing typologies of importance. In the course of this discussion, attention to connections between values is also highlighted as crucial in understanding the way in which value is attributed.

As noted in Chapter 2, despite much attention having been paid to the benefits of the use of urban parks, there is little understanding of how this aspect of value influences other forms of importance. It begins by focusing on direct use, highlighting that this form of value does not determine levels of other aspects of importance. Following this, temporal connections are stressed with recollection identified as serving as a motivation for current use but also connecting to option value, leading individuals to desire the potential to use a case study space in the future. Finally, the discussion below problematizes the division between use and non-use values arguing that this distinction is not meaningful when looking at value of urban park for individuals. Despite recollection and heritage values being shown to be relatively distinct in Chapter 5, here, continuity is identified across the use/non-use divide, as attention is drawn, for instance, to the way in which individuals express values such as bequest and philanthropy in relation to the social spheres of family and community .

6.2 Connecting Direct Use to other forms of value

While direct use has commonly been emphasised as the key facet of value (see section 2.5), Chapter 4 presented a challenge to this, identifying a series of limitations to this aspect of importance. There is, however, little understanding of how strongly connected this aspect of value is to other forms of importance, such as indirect use or existence and there is, therefore, little understanding as to whether people attach importance to a park even where they never

visit or rarely do so. In this study, however, levels of use represented the key point of distinction between case studies. As highlighted in Chapter 3 (and Appendix 2), case study community parks were chosen as atypical cases diverging on the basis of use and it was therefore possible to interrogate connections between use and value by, comparing levels of value expressed for a heavily-used space (Pudsey Park) with those for one which is less-used (Manston Park).

Due to the diversity of forms of importance, evident from Section 2.5, no single measure of overall value was obtained in this study. Instead, given their prior delineation in value typologies (see Table 2.5), Likert agreement scale items were incorporated into resident questionnaires to examine the extent of the individual facets of indirect use, option, recollection, philanthropy, existence, bequest and heritage amongst respondents. Specific statements and levels of agreement within each dataset are provided in Table 6.1. As highlighted in Chapter 5 in relation to recollection and heritage specifically, these agreement scale items are not without flaws, representing relatively crude measures of value, not specifically connected solely to the community park scale. Nevertheless, they offer a useful starting point for exploring connections between value and use.

Table 6.1 – Summary of levels of agreement to value-related Likert items				
			Manston Park dataset	Pudsey Park Dataset
N			140	153
Value	Statement	Agreement Level	%	%
Option	'I like to know that the park is there in case I want to use it in the future'	Strongly Agree	42.1	49.0
		Agree	45.7	41.8
		Neutral	9.3	6.5
		Disagree	-	0.7
		Strongly Disagree	0.7	-
		Unanswered	2.1	2.0
Bequest	'I like to know the park will be there for future generations'	Strongly Agree	57.1	63.4
		Agree	38.6	32.0
		Neutral	3.6	3.9
		Disagree	-	-
		Strongly Disagree	-	-
		Unanswered	0.7	0.7
Indirect Use	'Public parks provide a lot of indirect benefits for my community, such as environmental services'	Strongly Agree	19.3	20.9
		Agree	39.3	43.1
		Neutral	30.7	28.8
		Disagree	7.9	4.6
		Strongly Disagree	-	0.7
		Unanswered	2.9	2.0
Existence	'Public parks have an intrinsic value as part of nature'	Strongly Agree	30.7	47.1
		Agree	41.4	40.5
		Neutral	22.9	10.5
		Disagree	2.9	0.7
		Strongly Disagree	0.7	0.7
		Unanswered	1.4	0.7
Philanthropy	'I like to know the park is there for others to use'	Strongly Agree	50.7	58.8
		Agree	45.7	37.3
		Neutral	2.9	3.3
		Disagree	-	-
		Strongly Disagree	-	-
		Unanswered	0.7	0.7

To examine the connection between overall levels of value and direct use, it was necessary to assess how similar case study datasets were, examining whether levels of expressed agreement with value statements varied between Manston Park and Pudsey Park in the same manner as levels of use. Ideally, this similarity would have been examined statistically using chi-squared. However, this was not supported in the datasets due to low numbers of responses in categories associated with disagreement (noted in Table 6.1). In spite of this, on other measures such as those of central tendency (given in Table 6.2), levels of value expressed in relation to Manston Park and Pudsey Park appeared markedly similar. Here, for instance, as highlighted in Table 6.2., median responses diverged only on questions relating to use. Modal responses demonstrated slightly more variability with some divergence in relation to option, existence and heritage. However, the extent of divergence in modal level of agreement for these statements was not as marked as the difference evident in modal winter use. This similarity between datasets lends credence to the suggestion that direct use is not as directly connected to value as might be expected and, thus, though Manston Park was less used, there is only limited evidence that this was conducive to it being less valued, lending support to Hitchings' (2010) assertion of a need to consider nonusers as well as users when evaluating the benefit or importance of green spaces.

Table 6.2 – Measures of central tendency for frequency of use and levels of agreement to value-related Likert statements					
Value		Median		Mode	
		<i>Manston</i>	<i>Pudsey</i>	<i>Manston</i>	<i>Pudsey</i>
<i>Use</i>	<i>Summer</i>	Once a month	Once or twice a week	Once or twice a week	Once or twice a week
	<i>Winter</i>	Once or twice during season	Once every two weeks	Never	Once or twice a week
<i>Indirect Use</i>		Agree	Agree	Agree	Agree
<i>Option</i>		Agree	Strongly Agree	Agree	Strongly Agree
<i>Recollection</i>		Agree	Agree	Agree	Agree
<i>Philanthropy</i>		Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree
<i>Existence</i>		Agree	Agree	Strongly Agree & Agree	Strongly Agree
<i>Bequest</i>		Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree
<i>Heritage</i>		Agree	Agree	Agree	Strongly Agree

The relationship above was further supported where Kendall's τ correlation coefficients were calculated for the relationships between frequency of use of spaces (in both summer and winter) and agreement with Likert scale items. As demonstrated in Tables 6.3 a and b, several notable relationships were identified in the Pudsey Park dataset, with significant correlations evident between frequency of use and option (99% summer, 95% winter), philanthropy (99% both seasons), existence (99% both seasons) and bequest (99% both seasons) values. In all cases, weak positive relationships were identified, indicating that those who made more frequent use of Pudsey Park expressed a greater level of value by demonstrating higher levels of agreement. Levels of direct use and value appeared more detached in the Manston Park dataset with only the temporal values of option (95% across both seasons) and bequest demonstrating significant relationships. Bequest was, however, only significantly (95%) connected to summer frequency of use in this dataset; although, it should be noted that the relationship between winter frequency of use and this value was relatively close to significance with a p-value of 0.063 (see Appendix 6). Both of these relationships were of a similar strength to those observed in the Pudsey Park dataset.

The significant relationships identified above, in relation to philanthropy, existence and bequest, suggest some connection between use and non-use values. There is, however, some logical congruence for this relationship in relation to bequest and philanthropy which, despite being centred on other people, also relate to the use of parks spaces. The significant relationship identified between frequency of use and existence value appears the most counterintuitive as this statement related solely to the intrinsic importance of parks as a part of nature. However, as previously noted in Chapter 4, the presence of nature was closely connected to use by participants, with natural elements seen as key aspects of affordance which promoted the use of case study spaces. Furthermore, as noted in Figures 4.5a and 4.5b, in both spaces, natural aspects such as flowers and trees featured prominently as aspects most liked by participants. In contrast to the past-related values of recollection and heritage, greater continuity was also evident amongst future values, as significant correlations were not restricted to the future use value (option) and extended to its non-use counterpart bequest value. Given their blunt character, however, the agreement scale items offer little scope to further explore these relationships in more detail. However, in this study, qualitative data serve as a complement to quantitative analyses and temporal continuity and connections over the use/non-use divide are thus explored more deeply below.

6.3 Exploring continuity between temporal values

The identification of four comparative values in Chapter 5 was indicative of connection of past and present use and correlations presented above add weight to this suggestion. As noted in Tables 6.3a and b, although weak in nature, significant positive relationships were evident between recollection and winter use (95%) in the Manston Park dataset and recollection and both summer (99%) and winter use in the Pudsey Park dataset (95%). However, the significant relationships between use and future temporal values also identified above raise questions as to whether continuity extends to all temporal values. This is explored in the section that follows.

6.3.1 Continuity between temporal use values

As noted in Chapter 2, in prior frameworks, values related to the future were clearly delineated from those identified in relation to the present and, both future-related values (option and bequest) were characterised by a very high level of agreement across both datasets (see Table 6.1). Nevertheless, in this study, where the future was referenced in participant accounts of importance, this temporal distinction was much less clear-cut and present and future values were more readily intertwined. This connection was made most explicitly with regard to option value, where some participants drew direct connections between their potential future use of case study spaces and their current situation. Here, participants often situated this discussion in the context of their life-courses and this form of importance was most readily expressed by individuals who made relatively little use of the park at present, but expected to visit more often. As evident in Excerpt 6.1, this expectation was often associated a change in lifestage and, in common with narratives around current use (discussed in Chapter 4), the transition to parenthood or grandparenthood were key foci.

Table 6.3a- Correlation matrix summary of Kendall's tau correlation coefficients exploring relationships between frequency of use and levels of agreement with value-related Likert items in the Manston Park dataset									
	Use (Summer)	Use (Winter)	Indirect Use	Option	Recollection	Philanthropy	Existence	Bequest	Heritage
Use (Summer)		0.809	0.069	<i>0.188</i>	0.128	0.044	0.048	0.155	-0.001
Use (Winter)			0.125	<i>0.185</i>	<i>0.168</i>	0.088	0.035	0.131	0.054
Indirect Use				<i>0.376</i>	<i>0.296</i>	<i>0.368</i>	<i>0.425</i>	<i>0.332</i>	<i>0.434</i>
Option					<i>0.337</i>	<i>0.596</i>	<i>0.512</i>	<i>0.540</i>	<i>0.342</i>
Recollection						<i>0.477</i>	<i>0.431</i>	<i>0.477</i>	<i>0.444</i>
Philanthropy							<i>0.527</i>	<i>0.817</i>	<i>0.450</i>
Existence								<i>0.584</i>	<i>0.337</i>
Bequest									<i>0.331</i>
Heritage									
NOTE: Listed in bold – 0.01; listed in bold italics 0.05 Cells shaded in grey are correlation which cross the use/non-use value divide									

Table 6.3b - Correlation matrix summary of Kendall's tau correlation coefficients exploring relationships between frequency of use and levels of agreement with value-related Likert items in the Pudsey Park dataset

	Use (Summer)	Use (Winter)	Indirect Use	Option	Recollection	Philanthropy	Existence	Bequest	Heritage
Use (Summer)		0.796	0.090	0.237	0.201	0.207	0.238	0.246	0.077
Use (Winter)			0.044	0.170	0.163	0.201	0.253	0.216	0.092
Indirect Use				0.284	0.310	0.280	0.369	0.276	0.123
Option					0.520	0.516	0.579	0.588	0.317
Recollection						0.452	0.380	0.525	0.464
Philanthropy							0.453	0.774	0.411
Existence								0.513	0.245
Bequest									0.409
Heritage									

NOTE: Listed in bold – 0.01; listed in bold italics 0.05

Cells shaded in grey are correlation which cross the use/non-use value divide

Excerpt 6.1

"We don't really use it now. We hope to adopt children soon and I expect to make much more use of the park then."

Female, 35-44, Pudsey

This form of continuity between present and future use values was, however, by no means the most common. Given the quantitative correlations drawn between direct use and statements representing recollection and option value, a linear progression in importance might be expected, meaning those who with fond memories of prior use would utilise case study spaces more in the present and, thus, value most the potential for future use. However, connections drawn by participants commonly referenced values that were not temporally contiguous. Here, for instance, many further embedded their discussion of option value in their lifecourse, relating their future use of case study spaces to their use of parks in the past. While existing work (Ward Thompson *et al.*'s, 2008) has posited that present use is motivated by childhood experiences, in many instances, as in Excerpt 6.2, participant accounts extended this timeline, with a number of participants predicting use when they had children or grandchildren because they had used parks, either during their own childhood or when members of their family were young.

Excerpt 6.2

"I have used parks in the past when my children were young. I occasionally use the park when I have my young nephews to visit. I hope to use the park again if I am fortunate enough to have grandchildren."

Female, 45-54, Pudsey

This connection was further supported quantitatively. As highlighted in Tables 6.3a and b, when correlation coefficients were calculated to explore relationships between agreement scale items, significant positive relationships were evident, suggesting that those who agreed to a greater extent with a value statement were more likely to agree with another. Only limited analytical weight can, however, be attached to these correlations as this apparent significance may be indicative of the 'third variable problem'. It may be expected, for instance, that each individual measure of value would be correlated to a variable that represented the overall importance or value attached to a community park, but it was not possible to measure this as a single variable in this study. Conclusions drawn on the basis of these can, at best, therefore, be seen as tentative. Nevertheless, it was interesting to explore how the weighting of these value relationships varied between case studies.

While the connection between recollection and option values was evident in both datasets, its relative strength was highly variable, with a much stronger correlation evident in the Pudsey Park dataset. As demonstrated in Table 6.4, this correlation was the fifth strongest relationship identified in the Pudsey Park dataset with a value of 0.520 (see Table 6.3b) whereas it represented the seventeenth strongest in the Manston Park dataset with a value of 0.337 (see Table 6.3a). Greater similarity between case studies was evident when the relationship between recollection and bequest was examined as this correlation represented the 8th strongest in the Manston Park dataset (0.477) and fourth strongest in relation to Pudsey Park (0.525). This correlation points to some connection between use and non-use values and thus offers reasons to question whether this distinction is a meaningful one.

6.3.2 Connections between temporal use and non-use values

Despite the significant (99%) quantitative relationship identified between bequest value and direct use in the Pudsey Park dataset, in qualitative accounts, participants rarely referenced this connection. Instead, when investigated qualitatively, this form of value became complex as individuals readily embedded it in their personal life-courses and broke it down into distinct aspects. In many instances, as highlighted in Excerpt 6.3, when future generations were considered they were not treated in the abstract by participants as existing value typologies might imply.

Excerpt 6.3

"It reminds me of my childhood and I hope that if I ever have grandchildren it will be there for them"

Female, 45-54, Pudsey

Table 6.4 – Rankings of value-related Kendall's tau correlation coefficients					
	Manston			Pudsey	
	Variable 1	Variable 2		Variable 1	Variable 2
1	Philanthropy	Bequest	1	Philanthropy	Bequest
2	Option	Philanthropy	2	Option	Bequest
3	Existence	Bequest	3	Option	Existence
4	Option	Bequest	4	Recollection	Bequest
5	Philanthropy	Existence	5	Option	Recollection
6	Option	Existence	6	Option	Philanthropy
7	Recollection	Philanthropy	7	Existence	Bequest
8	Recollection	Bequest	8	Recollection	Heritage
9	Philanthropy	Heritage	9	Philanthropy	Existence
10	Recollection	Heritage	10	Recollection	Philanthropy
11	Indirect Use	Heritage	11	Philanthropy	Heritage
12	Recollection	Existence	12	Bequest	Heritage
13	Indirect Use	Existence	13	Recollection	Existence
14	Indirect Use	Option	14	Indirect Use	Existence
15	Indirect Use	Philanthropy	15	Option	Heritage
16	Option	Heritage	16	Indirect Use	Recollection
17	Option	Recollection	17	Indirect Use	Option
18	Existence	Heritage	18	Indirect Use	Philanthropy
19	Indirect Use	Bequest	19	Indirect Use	Bequest
20	Bequest	Heritage	20	Existence	Heritage
21	Indirect Use	Recollection	21	Indirect Use	Heritage
NOTE: Specific values of correlations are given in Tables 6.3a and 6.3b Correlations shaded in grey cross the use/non-use value boundary					

Instead, individuals focused on intergenerational importance within their own social spheres. In common with accounts of heritage (see section 5.2.2), some drew connections to their community, while others referenced intergenerational continuity within their own families, highlighting, for instance, as in Excerpt 6.4, planned use of the park with future child relatives. Here, close connections were drawn between bequest and recollection, as many stressed that their desire to use the space with their own children or young relatives was premised on the value they had gleaned from childhood experiences in these arenas.

Excerpt 6.4

I grew up on Austhorpe Road and my bedroom looked into the park. When I was little I always wanted to play there like the older kids and now have some amazing memories from the park. I love to take younger members of my family and know they will enjoy it and take their families"

Emma, 18-24, Manston

Where future generations were addressed more generally, at a societal level, in participant accounts, references were commonly normative in character, advocating, for instance, that all children should have access to such as resource. Once again, however, these accounts involved continuity and, hence, were often based on prior personal experience. For instance, as in Excerpt 6.5, individuals such as Christopher suggested that every child should be able to play in a park in the future because they themselves had enjoyed using it for activities such as football when they were a child and had markedly benefitted from it.

Excerpt 6.5

You might say you'd get away without it if it wasn't there, but I think because it is there that's, for children, especially children, it's children that really get the full benefit, because that's what sticks in your mind as a, like my mind, your mind, you go on a park an' you play an' do this an' that an' as you get older you realise that that played a big part in your life. It got you fitter, taught you 'ow to play football, made you, showed you how to be, make friends with other people you don't even know, things like that, it's so good.

Christopher, 75-84, Manston

Existing frameworks make a clear separation between use values (that provide benefit to the individual) and non-use values (which relate to other people and entities). However, the discussion above provides a clear challenge to this distinction. Amongst participants, neither option nor bequest values were considered in these absolute terms as great commonality was evident between the two. The explicit connections drawn by participants to family represented the greatest obstacle to the use/non-use division as, here, for instance, in qualitative accounts option value was discussed in connection with the transition to parenthood and accounts of bequest also centred on the importance for participants' own children in the future. The lack of clarity in this distinction gives rise to questions as to the meaningfulness of the division between other use and non-use values represented in existing value frameworks. This is explored below.

6.4 Further Connections over the Use/Non-Use Divide

The socially-situated nature of future values, discussed above, would suggest that the division between use and non-use values is at best blurred and at worst meaningless. However, that conclusion cannot easily be drawn as this distinction has not been ubiquitously flawed in analysis explored up to this point. For instance, the division between past-related values was much more marked. Despite Tables 6.3 and b demonstrating some quantitative connection between recollection and heritage values, in Chapter 5, little qualitative connection was evident between these use and non-use past-related values as, although theoretically possible, no family dimension of heritage was evident in qualitative accounts. It is therefore necessary to examine the two other logical pairings of use and non-use values to interrogate this divide more thoroughly and explore whether this theoretical distinction was upheld.

The natural partner use value for philanthropy is direct use as both values relate to the active use of a space, either by an individual themselves or by others. A further logical pairing for exploration is that of indirect use and existence values. There is scope for continuity between these values as both values relate to the character of a space external to its use, with indirect use focusing on practical benefits to individuals, while existence denotes the intrinsic importance of the park as an aspect of nature. These pairings are addressed in turn in the sections below.

6.4.1 Direct Use and Philanthropy

As demonstrated in Table 6.3b, some quantitative connection was evident between direct use and philanthropy Likert scale items and this correlation was found to be significant (99%) in the Pudsey Park dataset. However, philanthropy represented the value with the highest level of agreement in both datasets (as highlighted in Table 6.1) and, thus, this was not the case in the Manston Park dataset where direct use was relatively low but levels of philanthropy were high. The Likert statement 'I like to know the park is there for others to use' appeared to be a particularly blunt measure of this form of value, representing philanthropy only in its broadest sense where, qualitatively, much greater diversity was evident. Here, for instance, as in Excerpt 6.6, some philanthropic attitudes expressed in relation to community parks focused at this broad level, where participants directly discussed case study spaces as relatively unimportant for them but important for other people.

Excerpt 6.6

Many people utilise the park much more than I do and although I do not use it so much I do feel it is important.

Male, 25-34, Pudsey

The majority, however, demonstrated a greater level of specificity in accounts and philanthropy was expressed more readily in a socially-contextualised fashion. Here, there was clear commonality between accounts and those expressed in relation to bequest value, as the distinction drawn between the importance attached to case study spaces, based on participants' own use, and that centred on other people's use, was not as definitive as indicated. Instead, in contrast to existing frameworks, use by others was not solely discussed in abstract terms and participants readily related accounts of philanthropy to the social groups of family and community, discussed below. This commonality between philanthropy and bequest is perhaps unsurprising because great connection can be drawn between these two values. As the Kendall's τ correlation coefficients, ranked in Table 6.4, demonstrate the relationship between philanthropy and bequest represents the strongest correlation in both datasets. Furthermore, these values are attitudinally similar with both sentiments relying on the expression of altruism. As demonstrated by Excerpt 6.7, these values were also explicitly connected by some participants in their accounts of the importance of their community park.

Excerpt 6.7

"To provide an area of recreation for people to use and to be there for future generations to enjoy"

Male, 55-64, Pudsey

6.4.1.i. Family

Family was a key focus of philanthropy amongst participants in this study. The discussion of direct use in Chapter 4 provided some evidence of this, for instance, where a 'narrative of need' was heavily associated by participants with children and families, and, here, for instance, as exemplified in Excerpt 6.8, individuals stressed the benefits of these arenas for children and families even where they did not have children themselves.

Excerpt 6.8

"The parks are a good place to take children to play. Although I don't have any children at the moment it is nice to see parents and children enjoying the parks as we pass through with the dog or if we are using it as a shortcut."

Male, 25-34, Manston

For some, these accounts of family-related philanthropy were associated with the presence of particular facilities, such as playgrounds, as in Excerpt 6.9. However, for the most part, across both case studies, references to this form of importance were less focused, with local parks identified as important because they “cater for families” (MRS019) in a more general sense.

Excerpt 6.9

“I don't use the playground but it is clearly an important and well-used place for families”

Male, 45-54, Pudsey

In many cases, as in Excerpt 6.10, case study spaces were considered particularly useful for families due to their inclusiveness in terms of scope for activity, as it was stressed by participants that this enabled use from all generations.

Excerpt 6.10

“Parks are very important for family to spend time together. Children are able to play by themselves or make new friends. Older generations are able to enjoy the flowers and parkland and have a game of bowls or listen to a band.”

Female, 75-84, Pudsey

This aspect, in turn, was discussed, as in Excerpt 6.11, by participants in both case studies as crucial to enable families to “spend quality time” together, with many participants emphasising the contrast between this and day to day experiences, in which time pressures were thought to make family interactions more fleeting.

Excerpt 6.11

“It is important because families can go for picnics, play football, tennis, take dogs for a walk and children can play on the playground making it a fun, cheap, entertaining day for the whole family to spend quality time together.”

Female, 25-34, Manston

While the above discussion highlights the large degree of philanthropy that revolved around the notion of family, it represents little challenge to the use/non-use distinction of direct use and philanthropy as in all these instances the notion of family is addressed in a generic sense. However, many participants in this study blurred this dividing line, by making more specific references to their own family and their own personal experience. In line with the discussion of use in Chapter 4, these specific references also mostly focused on particular user groups

with accounts consisting, for instance, of references to elderly relatives as in Excerpt 6.12 and references to their own children or grandchildren as in Excerpt 6.13.

Excerpt 6.12

“Although I do not use Pudsey Park so much I know a lot of people who do. Family with dementia enjoy visiting. Elderly family enjoy the bands who play at the bandstand”
Female, 25-34, Pudsey

These references to participants’ own family represented a challenge to the use/non-use distinction as for many they were accompanied with a sense that case study spaces were “areas that can be used throughout your lifetime” (PRS025) and, as in Excerpt 6.13, participants’ own use was interwoven with that of their family members.

Excerpt 6.13

“I think that if they are maintained they are a great asset to the community. I used to use the park as a teenager, my children used the park and now also my granddaughter. I do not use it as often as I would like but I feel that if it was not there it would be a loss to the community and the people that use the park on a regular basis.”
Female, 35-44, Manston

6.4.1.ii Community

Across both case studies, non-abstract, socially-situated accounts of philanthropy were not solely related to family, as residents also stressed the importance of their park for members of their community. Some, such as Neville (see Excerpt 6.14), discussed this form of philanthropy in a very specific way, identifying particular community groups, such as bowling clubs, as those for whom the local park was particularly important.

Excerpt 6.14

The fact that I don’t use them very much doesn’t mean to say other people don’t and I know other people do. I know Pudsey Bowling Club does [...]and I know what’s goin’ on there, and I know at times, they fight, who can go on the bowling green ‘cause there’s so many games being played, this is in peak season, I know the children’s play area is well patronised... I believe the budgies and minor animals are reasonably well patronised ‘cause.. I don’t think I’ve ever walked through without seeing somebody goin’ through.”
Neville, 75-84, Pudsey

Others, however, stressed the importance for their community in a more general sense, with one participant from the Manston Park case study suggesting, for instance, that the park is “a big garden for all the community to enjoy” (MRS112). In contrast to the discussion of family

above, despite being more general in character, even these accounts of community-related philanthropy served to undermine the use/non-use divide somewhat as participants referenced the community of which they are a part, rather than community as an abstract entity. In common with references to family, the inclusiveness of case study spaces formed the basis for much of this community-related philanthropy and, once again, as highlighted by Excerpt 6.15, a focus on cross-generational inclusion was evident in accounts, with one participant from the Pudsey case study stressing, for instance, that Pudsey Park provided “valuable public space for all members of the community, young and old alike” (PRS181).

Excerpt 6.15

“Manston Park is very important because it can be used by all generations of the community, as it provides various activities and it can easily be accessed especially by those who don’t own a car. It provides pleasure for many people. [...]It plays a key role in the local community and it would be an unforgiveable act to ever lose this unique space”
Male, 65-74, Manston

The division between use and non-use values was further compromised by accounts of community-related philanthropy where individuals explicitly intertwined their own use of the space and its importance for their community in highlighting, for instance, the appeal of these arenas, as in Excerpt 6.16.

Excerpt 6.16

Parks are part of the community and an important part of society. You don't have be a certain age to go, it's free and its important children have the space to play especially if their homes do not have a big garden. Parks are fantastic places to visit. We use them all the time.
Female, 25-34, Pudsey

6.4.2 Indirect Use and Existence

The last pairing of use and non-use values is that of indirect use and existence, however, it should be noted that neither of these elements was a particularly dominant aspect in participant accounts of the value. This is perhaps unsurprising, given the anthropocentric focus of the value explored in this study. Nevertheless, these aspects did feature to a certain extent in expressions of the importance of case study spaces and some fusion was evident between these elements as common threads were drawn between them.

As highlighted in Chapter 2, indirect use value is the most qualitatively diverse item in existing value frameworks, representing all benefits derived from the functions of an urban park setting. This diversity makes it difficult to represent as single value statement and, thus, as highlighted in Table 6.1, participants expressed the most mixed opinions in relation to this value with the lowest levels of agreement evident (58.6% and 64.0% in the Manston Park and Pudsey Park datasets respectively). In contrast, existence value generated a much higher level of agreement (72.1% in the Manston Park dataset and 87.6% in the Pudsey Park dataset). At this broad level, it may appear that there is little commonality between these values, however, in contrast to other values, both demonstrate highly diverse opinions with all levels of agreement (and disagreement) selected by participants.

In Choumert and Salanie's (2008) typology of value (noted as the most complete summary in Chapter 2), indirect use was posited to derive almost exclusively from the environmental functions of a space, representing aspects such as pollution amelioration, water management and aesthetic appeal. However, Chapter 2 emphasised the need to consider economic impacts such as house price increases, employment opportunities and tourism, together with neighbourhood reputational impacts as further facets of this value and these economic aspects of indirect use value were indeed evident in case study accounts. This was particularly the case in relation to Pudsey Park where a number participants considered the park a draw for visitors, with one suggesting that the park served as an "attractive central focal point that will always bring people in from outside" (PRS252).

In spite of this, in accordance with existing understandings of value, the most dominant facet of indirect use expressed by participants related to environmental aspects of importance. The elements of environmental provision referenced were not, however, as diverse as might be expected. While, as noted in Figures 4.5a and 4.5b, getting 'fresh air' was mentioned as an aspect most liked about both case study spaces, as noted in Chapter 4, the consideration of case study spaces as traffic-free was raised by participants in relation to safety concerns and direct use rather than being discussed as an antidote to neighbourhood noise or air pollution. Instead, indirect use value was most prevalent where it was expressed in terms of aesthetics, for instance, where, as in Excerpt 6.17, participants considered the park aesthetically appealing when they passed by.

Excerpt 6.17

"We don't use the park now, because we don't really walk much but we always get a nice feeling when we pass Manston Park. It's kept very very... It's an absolute picture. It's beautiful and a great, it's wonderful for the area"

Mavis, 85+, Manston

Here, in many cases, case study spaces were considered especially aesthetically appealing due to their capacity to break up the townscape. For several participants this was particularly pivotal where spaces were seen as impediments to development pressure and this sentiment featured particularly prominently in the Manston Park case study where, as highlighted by Excerpt 6.18, further development was seen as a pressing concern.

Excerpt 6.18

"I think parks are so important to provide space, fresh air and observing nature. More so because Crossgates is rapidly becoming a completely built up area"

Male, 65+, Manston

In accounts of the importance of case study spaces, existence value was evident where participants focused heavily on the environment and, rather than discussing the environment in general, here, attention was commonly drawn to the provision of space for wildlife. As highlighted in Excerpt 6.19, in conjunction with this, a number of participants emphasised the protection of "a place for wildlife to thrive in the city" (MRS114) in these accounts.

Excerpt 6.19

"I think it's a good little hub for local wildlife – hedgehogs, foxes, along with the embankment 'cause you get a lot of them down there, but yeah, birds even...yeah there's a lot of, there's increasingly more and more birds of prey in the area, you know, a lot of kites about, there's a lot of squirrels up there as well aren't there?[...] it's good to have a little protected green space"

Liam, 18-24, Manston

Little continuity might be expected between these values as, in contrast to the other value pairings discussed, these aspects cannot be socially situated by participants. However, a degree of fluidity was evident in both case studies as participants did not readily separate these environmental elements in their accounts of importance. This intertwining is highlighted in Excerpt 6.20 where benefits for the atmosphere, which could be considered part of indirect use, were not readily delineated from the benefits of greenery for wildlife.

Excerpt 6.20

“Such places provide for a definite need in communities all over Britain. An open space is essential where there are continuous buildings. Trees and flowers are helpful for the atmosphere and wildlife such as birds and bees”

Male, 65-74, Pudsey

Further melding of these use and non-use elements was evident in some of the phraseology used in the expression of these nature-related values. This was particularly clear in the use of the word ‘oasis’ which was used in diverse ways: to refer to case study spaces as a sanctuary for birds and wildlife (existence value); to identify parks as areas of particular visual appeal in the neighbourhood (indirect use) and to highlight the peace that could be obtained in these arenas (direct use).

Fluidity was not however restricted to connections of existence and indirect use values and, in some instances, indirect use was not readily separated from aspects of direct use. As highlighted in Chapter 4’s discussion of affordance, contact with nature was commonly mentioned as a motivating factor for use across both case studies and, as such, as highlighted in Excerpt 6.21, there were several instances where this use-based discussion of natural features was not readily distinguished by participants from the importance of case study spaces as visual breaks in the landscape.

Excerpt 6.21

“In modern times people live in built up areas without greenery and do not have nice views. From my house I overlook other houses from all direction. I would say parks such as Pudsey have become more important as communities have become more urbanised. The park provides access to beautiful natural scenery which I imagine past generations may have taken for granted having a naturally rural environment”

Male, 35-44, Pudsey

6.5 Conclusion

This chapter has provided clear evidence of fluidity between different facets of value, in marked contrast to existing conceptions of the importance of community parks. Direct use was found to be less dominant over other forms of value than might have been expected and two key forms of continuity were highlighted in participant accounts. Firstly, a high degree of temporal continuity was identified and highlighted as highly influential on the way in value was

attributed. Here, notably, connections were not solely found between temporally contiguous values, with fluidity evident between aspects such as option and recollection, as it became evident that, for many individuals, the likelihood of them using the space in the future was closely connected to their life-stage and premised on the use that they had made of that and other green spaces as a child.

The second form of continuity identified undermined the division between use and non-use values, with this distinction, presented in existing frameworks, found to be problematic. Here, both bequest and philanthropy values were stressed as more diverse than suggested and close connections were therefore drawn to their respective partner use values of option and direct use. Here, the attribution of non-use values to 'others' in a nebulous sense was not meaningful neither of these values was readily retained in the abstract by individuals. Instead, participants attributed these facets of value to their own social spheres, thus, blurring the dividing line between use and non-use elements. Some connection was also found between existence value and its partner use value, indirect use, although commonalities here were of a more superficial nature. The lessons of this chapter, taken together with the limitations on direct use highlighted in Chapter 4 and the past-related values identified in Chapter 5, point to a series of omissions or flaws in existing typologies of the value of urban parks and raise questions as to how our understanding must be reframed when exploring the value of these leisure spaces from an individual perspective. This question is explored in Chapter 7.

Chapter 7:

Discussion: Reframing Conceptions of Value

7.1 Introduction

This chapter identifies four key challenges to the existing understandings of the non-economic value of urban parks, situating them in existing literature. Firstly, connections between use and, non-use values are stressed as a notable challenge, with diversity (premised on the social spheres of family and community) identified within non-use. Attention is then drawn to past-related values as a further significant addition to existing understanding. This temporal horizon, although missing from prior value framings, is highlighted as pivotal to understanding the importance individuals attribute to resources. The third aspect explored is negativity, which, despite a prior lack of acknowledgement, is noted as heavily interwoven with positive accounts of importance. Finally, emphasis is placed on understanding value as spatially relative as comparison with other leisure resources is identified as an inherent facet of accounts.

As noted in Figure 7.1 (reproduced from Figure 2.1), the final research question of this study examines how insights into the importance of urban parks from an individual perspective necessitate the reformulation of typologies or frameworks of urban park value. Each of the above insights highlights a fundamental limitation of existing value framings, particularly that of Choumert and Salanié (2008), identified in section 2.4 as the most complete typology constructed from an individual perspective. In the course of this discussion, a new diagrammatical representation of value is thus constructed to take account of these contributions. While this chapter invariably demonstrates the contribution made by this study, the final section also discusses the key limitations that must be placed on analytical conclusions drawn. Here, the implications of aspects such as dataset size and response bias on the generalizability of insights are outlined, in contrast to more detailed statistical limitations, already noted in Chapters 4, 5 and 6.

7.2 Use as a facet of value and the importance of others

As highlighted in Chapter 2 (sections 2.4 and 2.5), prior individual perspectives on the value of urban parks have stressed the importance that people place on the utility, or benefit, that they themselves derive from a space and it is on the basis of these use values that other bodies of

work (derived from firm and community perspectives) most readily align to understandings of importance (see Table 2.5). Choumert and Salanié's (2008) typology (reproduced in Table 7.1) provides the basis for this table in section 2.5 and, while use values incorporate attention to both future potential use and indirect benefits, the greatest overlap of work is focused on aspects of direct use and the benefits thereof for the individual. Preceding analysis has therefore, paid particular attention to this facet of value; exploring motivations for use and the dominance of this aspect in accounts of overall importance (see Chapter 4 and 6 respectively). However, conclusions drawn in relation to these aspects challenge existing understanding. Throughout analytical chapters, the distinction between use and non-use values has been called into question, in marked opposition to existing understandings of use-related value. While use remained a focus in participant accounts of the value of case study community parks, these accounts were in no way centred solely on individuals themselves, as participants related discussions of value to the social groupings within which they sit, such as their kin, friends and community. A reformulation of value typologies is thus required. This incorporation of social situation into representations of value is also discussed in more detail below.

Figure 7.1 – Study Research Questions (reproduced from Figure 2.1)

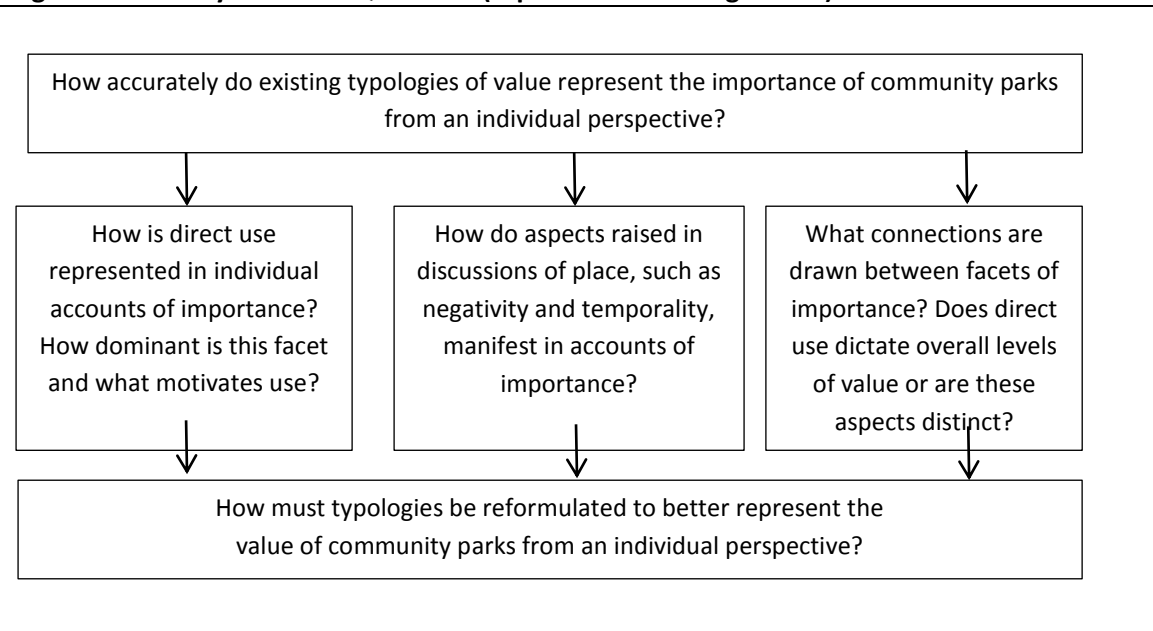


Table 7.1– The forms of value identified by Choumert and Salanié's (2008)

Use values	Direct use	Recreational benefits
	Indirect Use	The benefits derived from the function of green space e.g. environmental benefits
	Option	The potential for future use
Non-use values	Existence	The benefit of simply knowing it exists irrespective of potential use
	Philanthropy	The importance of the resource being there for others
	Bequest	Preservation for future generations

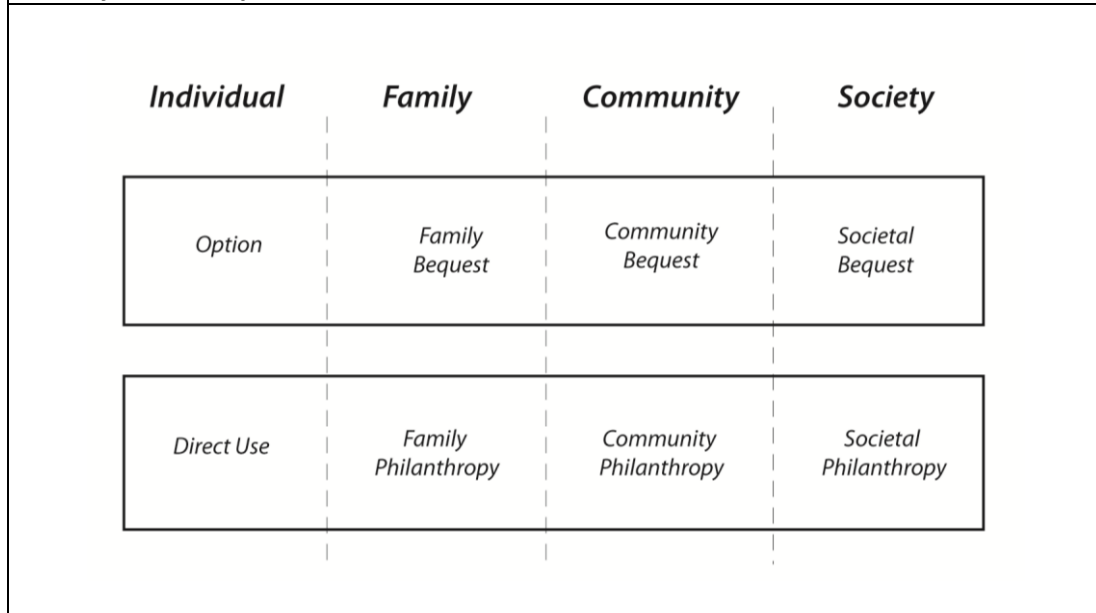
7.2.1 The distinction of use and non-use – understanding value as socially situated

While much of the previous work on the value of urban parks has centred on the benefits that accrue to the individual themselves, data presented in Chapters 4 and 6 have raised questions as to the dominance of these use values, both in and of themselves and in determining the prevalence of other forms of importance. As mentioned in Chapter 2, in framings of value (most notably that by Choumert and Salanié (2008) but also that by Pearce (1993)), non-use values have been identified, representing the importance attached to a green space resource by an individual on the basis of the benefits which accrue to others. Within these frameworks, authors have nonetheless played down the dominance of non-use elements. However, in contrast to these assertions, in participant accounts of importance obtained in this study, the incidence of non-use values appeared high.

In itself, the prevalence of these values represents a challenge to existing understandings of the non-economic value of urban parks. However, the notable diversity within these aspects of importance points to a fundamental flaw in the way in which non-use values have been framed to date. As demonstrated by Table 7.1, in prior accounts of the importance of urban parks, a clear delineation has been drawn between use and non-use elements, with a dichotomous relationship constructed between values which relate to the individual themselves and those that address benefits for others. While temporal distinctions were maintained, for participants, the division between use and non-use was much more blurred and, benefits for others were readily intertwined with benefits for themselves. Furthermore, rather than being discussed in a general sense, the value of case study spaces was explicitly

connected to the social groupings of which individuals were members. In Chapter 2, the catch-all nature of non-use values was noted as having been acknowledged by authors, such as Crowards (1997), as a distinction between 'significant' and 'distant others' was identified. The influence of this distinction was, nevertheless, played down. In this study, however, as highlighted in Chapter 6, these social groupings fundamentally structured accounts of the importance of community parks and, in order to recognise this more fully, representations of value must be restructured.

The most pivotal change to existing representations is to deconstruct the dichotomy of use and non-use values, representing them, instead, as different ends on a spectrum of value, with gradation between two distinguished by the strength of social tie (see Figure 7.2). As noted in Chapter 6, the main social structures which values centred on were 'family', 'community', and 'society' and these groupings therefore form the basis for the classification offered in Figure 7.2. Emphasis placed on these groupings offered significant challenge to perceptions of the dominance of individual importance. In accounts of value, great emphasis was, for instance, placed on the family, in line with the focus on children evident throughout this discussion, and, it was through this focus on family that the tendency for prior understandings to overstate the individual was made acutely clear as, some, particularly parents, attached notably greater imperative to the significance attached to a park for their child or grandchild than any importance derived at the individual level. Connections can readily be drawn here to Crowards (1997) discussion of altruism (addressed in section 2.4) and the distinction drawn in this work between 'selfish' and 'selfless' altruism. The emphasis placed on aforementioned social groupings could be seen as highly indicative of selfish altruism, with individuals according importance to resources on the basis of having a vested interest in these groups when compared to society at large.

Figure 7.2 – Diagram of forms of value attributed to community parks presented as socially-situated spectrums

The emphasis on family in this study is a key contribution when related to existing literature on value as, although urban parks have been recognised as “family refuges” by authors such as Byrne and Wolch (2009:743), this has not been reflected in typologies of non-economic value to date. In participant accounts, family level values were evident where participants explicitly discussed relatives, and attention to these individuals was pervasive. Here, as noted in Chapter 6 (section 6.4) significance was particularly placed on the inclusiveness of these arenas for all ages, with attention paid to the intergenerationality of case study spaces. These intergenerational considerations did not solely focus on participants’ children, with mention also extending to their grandchildren’s generation. This lends some credence to Pearce’s (1993) suggestion that the interests of future generations are served to some extent in valuation exercises by familial relations. The question can, nevertheless, be raised as to how many generations’ interests should be considered. Accounts cannot, for example, consider those in the more distant future and, given timescales involved in environmental concerns such as sustainability, the incorporation of the interests of solely proximate future generations would be inadequate.

Given the above, the familial situation of individuals was clearly influential on accounts of value. However, while this aspect was apparent in interview data and, in some cases, qualitative questionnaire sections, no explicit question on this was included in questionnaires. Respondents were asked whether they had or looked after children. But, the rationale for this

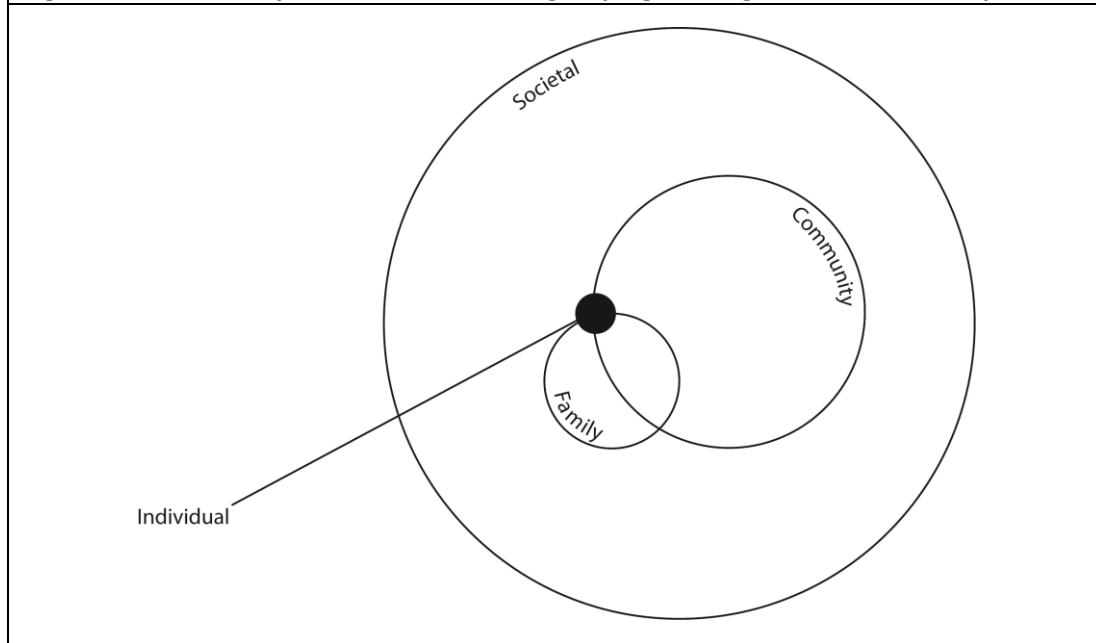
was to ascertain whether there was scope for children to form a motivating factor for direct use and parents or grandparents could not be distinguished from those, such as childminders, who cared for children as part of their job. Evidently, however, where connections are drawn to selfish altruism (Crowards, 1997), there is a need to understand the emotive or familial relationships present as well as the functional constraints of looking after children, because, while, on this basis, individuals will likely serve the interests of their own offspring, they may not do so for others' children.

The inclusion of community as a sphere of value is also not without its issues. As noted in Chapter 2, the notion of 'community' has been highlighted as diffuse, with authors such as Crow and Allan (1994:3) stating that this is in essence about "people having something in common". Section 2.5.2.iv stressed that, on this basis, diversity has emerged in forms of community, as authors such as Forrest and Kearns (2001:2126) suggested that "residual bonds of spatial proximity and kinship" had been undermined. In spite of this, and in line with authors such as Völker *et al.* (2007), participant attention to 'community' was widespread and centred on understandings of this as a local entity, based on those who resided close to case study spaces. Given the dominance of attention to community, a quantitative measure of social connections, such as number of friends in the local area, may have been useful, facilitating the definition of community and enabling the exploration of how the prevalence of certain forms of value may have varied by level of connection. Nevertheless, the definition of community is unlikely to undermine its representation in Figure 7.2 as here values were considered 'community' values where they were discussed in relation to social connections beyond family relations.

Invariably, in the same way that the definitive boundary between use and non-use values could be questioned, so too can questions be asked as to how readily separable the social spheres of 'family', 'community' and 'society', identified above, are. Figure 7.3 provides a Venn diagram of the separation, understood in this study, between these social spheres. As noted in the diagram, the most problematic delineation is that between family and community, forming the middle ground between value attributed at the individual level and that discussed in more general societal terms and, in some instances, the distinction drawn between these groups was not clear cut. This was particularly the case, for example, in relation to family friends, where participants discussed individuals as if they were kin when they were not strictly related to them. Any categorisation is, however, necessarily summative in form

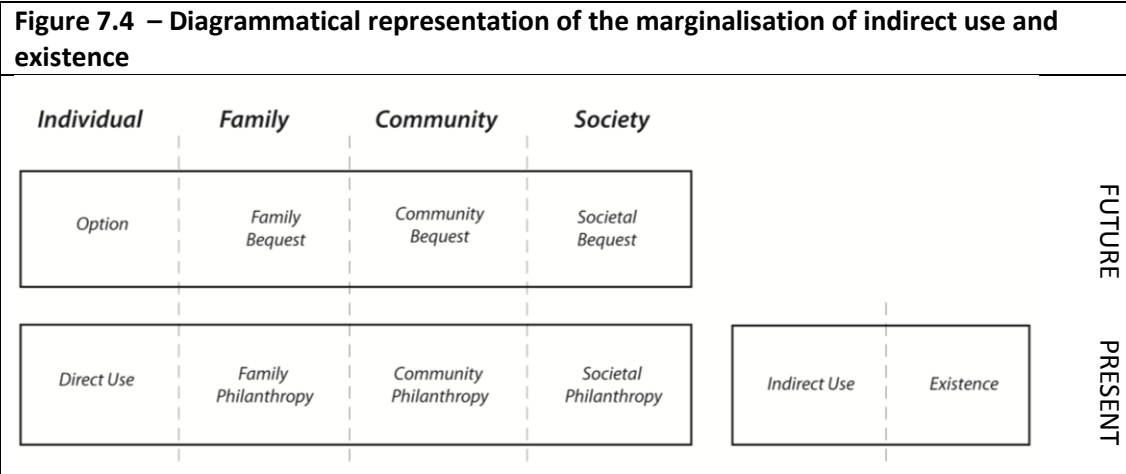
and, by not specifying the boundaries of social groups, the reconfiguring of the value framework as spectra, offers scope for overlap between these spheres. Furthermore, despite the terms 'family' and 'community' being potentially problematic, the adoption of these as social framings of value readily aligns with the analytical approach of grounded theory employed in this study as they are drawn directly from and feature heavily within data collected.

Figure 7.3 – Visual representation of social groupings through which value is expressed



7.2.2 The place of indirect use and existence

In the course of the above discussion, no mention has been made of the values of indirect use and existence, previously identified and acknowledged by authors such as Pearce (1993) and Choumert and Salanié (2008). A potential criticism of the above reformulation is that it may marginalise these values, as, given that they relate to non-personal aspects, they cannot readily be socially-situated in the same manner. This division is made clear in Figure 7.4. It was, nevertheless, noted in Chapter 6 (section 6.4.2) that these facets of value did not feature heavily in participant accounts of the importance of case study spaces and the rethinking discussed above thus presents an accurate representation of the perspectives encountered, having been grounded in data, as previously mentioned. It was however also noted in Chapter 6 that some continuity was evident between these values and theoretical developments can therefore still be identified in relation to both as great diversity was evident in the way in which these forms of value were expressed.



Despite the clear logical imperative, provided in Chapter 2 (section 2.5.3), to extend the definition of indirect use to include economic facets in addition to environmental benefits, the incidence of this form of value was low, and attention to its economic element relatively limited in comparison to its environmental component. Nevertheless, as noted in section 6.4.2, some economic aspects of indirect use were apparent and, in accordance with Chiesura's (2004) suggestion, particular significance was attached to the role of urban parks in drawing in tourism. But, no mention was made of the potential economic importance of neighbourhood reputation or the effects of green spaces on house prices. This lack of reference to house prices may seem curious, given the emphasis on resultant house price change evident in economic methodologies such as hedonic pricing (see section 2.2.1). However, this lack of attention may be a manifestation of the limitations of qualitative methods addressed in Chapter 3, where participants are less willing to discuss sensitive topics, such as money, in an interview-facing setting. On the other hand, the initial social survey conducted in this study was not interviewer-administered and, yet little mention of house prices was made here either. It is also possible that this lack of attention may result from the current economic climate as, in an era of austerity and economic downturn, house price returns of green spaces are perhaps less tangible or assured than community financial gains such as tourism where visitors are clearly visible as outsiders within the neighbourhood.

The environmental aspects of indirect use (discussed in section 2.5.3) formed the basis for much of the discussion of this form of value. However, given the general underrepresentation of this aspect of importance, many of the functions referenced in Chapter 2, such as water drainage and urban cooling, went unmentioned. Authors such as Chiesura (2004) and Benedict

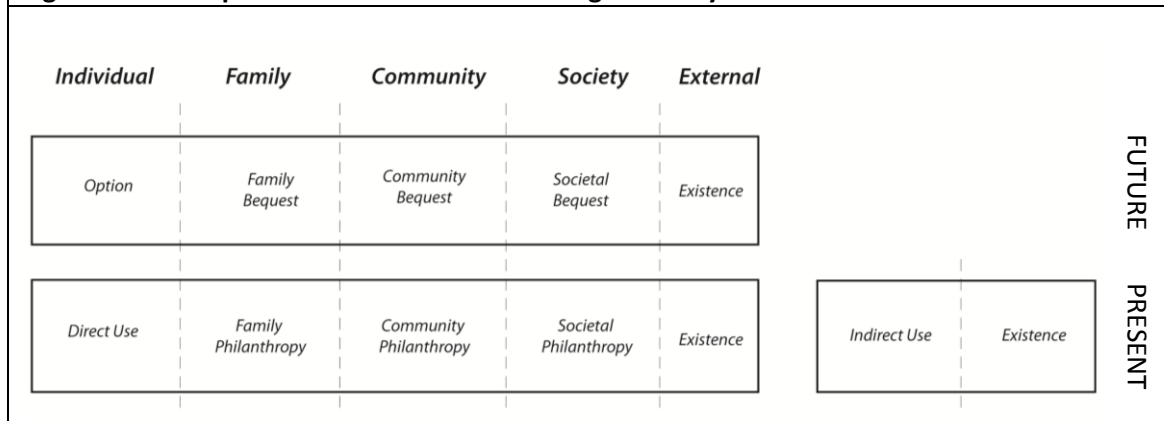
and McMahon (2002) also emphasised the potential contribution of urban green spaces to biodiversity, but, there was also little appreciation of that in accounts. The prime environmental element of indirect use stressed was aesthetics and the aesthetic contribution of both spaces was considered high (see Chapter 6), offering clear support for James *et al.*'s (2009) suggestion that individuals prefer greener urban centres. While, as mentioned in section 2.5.1.i, it has been emphasised that urban green spaces represent more than just visual stimuli for individuals, the appearance of spaces was most stressed by participants. Although some mention was made of the “auditory” element identified by Chen *et al.* (2009) with reference made to, for instance, children’s laughter, the other “olfactory and tactile elements” noted by these authors remained unaddressed.

Hur *et al.* (2009) highlighted that the aesthetic contribution of greenery can affect neighbourhood satisfaction and, in this study, evidence suggested that participants felt that case study parks not only offered aesthetic appeal in their own right but also improved the look of the area. Here, in line with suggestions from authors such as Chiesura (2004) and Bradley and Millward (1986), emphasis was placed particularly on the capacity for these spaces, as parts of nature, to break up the townscape and impede any further development. Attention was also paid to the role of community parks in providing ‘fresh air’. While scope was raised in Chapter 2 (section 2.5) for this to be an expression of indirect use value, representing an acknowledgement of the ameliorative function of these spaces in relation to pollution, this was found to not be the case, with attention instead connected more readily to direct use and its associated contribution to wellbeing. As with other use/non-use value pairings, some fluidity was evident between the elements of indirect use, discussed above, and existence value. Nevertheless, here, rather than being based on social situation, values were expressed on a spectrum of instrumental to intrinsic importance and, as noted in Chapter 6 (section 6.4.2), in some instances the distinction between these aspects of significance was not stressed.

Given attention to instrumental aspects of nature, the demarcation of value by social situation is particularly problematic in relation to existence value. This is because this form of value has already been implicated in philosophical debate as to what constitutes value and the way in which intrinsic value can be classified as intrinsic (see section 2.4). Authors such as Curry (2006) have highlighted that an object which has intrinsic value is valued for its own sake, outside of its use for any end. However, questions could be raised as to whether reframing the

importance of community parks through the lens of social spheres marginalises the inherent importance of these natural spaces, portraying value as anthropogenic in some way. Nonetheless, this study, and the framework of values proposed in this chapter, does not make this claim, but rather, explicitly emphasises the values attributed to urban parks by people. To say that a natural space possesses intrinsic value does not invalidate the need to better understand and more accurately represent anthropocentric value, as this study does.

In spite of this, given the inability to socially situate indirect use and existence values, these aspects of importance may seem invariably fated to be underrepresented in individuals' conceptions of the non-economic value of urban parks. As observed in Chapter 6, however, great diversity was evident in expressions of existence value and there were instances where existence value could be related in some way to other values, such as philanthropy, which were framed through the spheres of family, community and society. Authors such as Lockwood (1999) have suggested variability in attention to nature (see section 2.4), with people, in some cases, privileging references to animals and wildlife in discussions of nature, over other natural elements such as plants. This was also apparent in accounts of existence value in this study, where there were instances where individuals attached some level of anthropomorphism to these creatures, leading to a sense that individuals were able to engender some slight emotional connection to animals mentioned. Given this, there is potential to add existence value to framings of importance as representing the least proximate form of philanthropy, in addition to an independent form of value. Existence value also extended into the future and, as noted in Figure 7.5, it can thus also be treated as the most distant form of bequest value. While, as highlighted here, prior framings of importance have included the future as a further temporal aspect of value to be considered, it has been underlined in analytical chapters is that a more complete understanding of temporality is required. This is the second key challenge to existing understandings which is discussed in detail in the section that follows.

Figure 7.5 – The place of existence value amongst socially-situated values

7.3 Incorporating the importance of the past

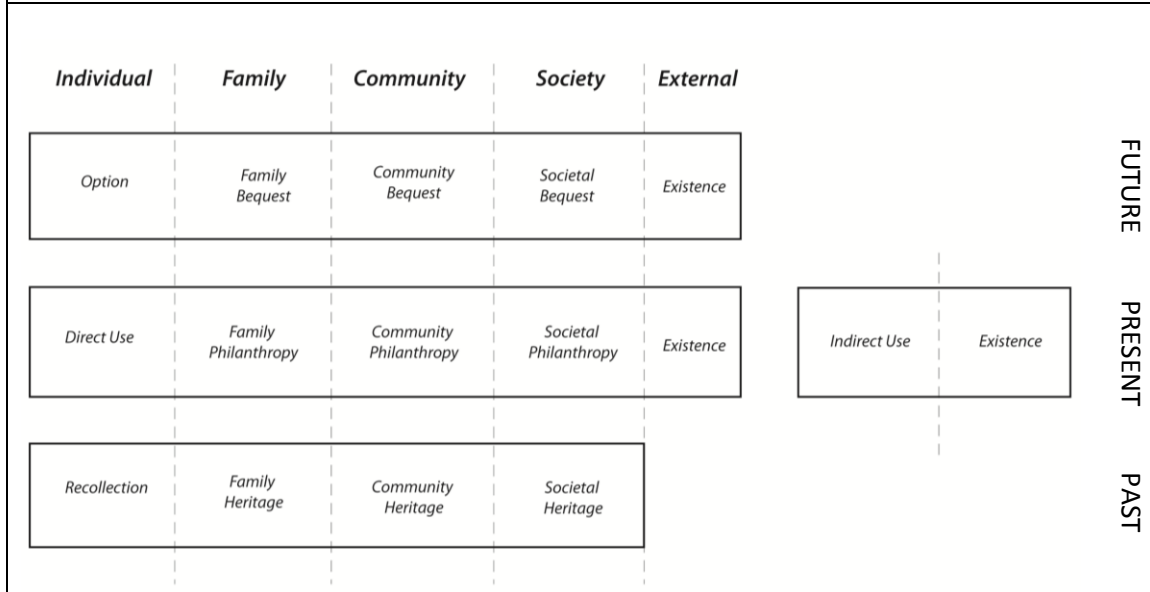
The scope for attention to the past to feature in accounts of the non-economic value of community parks was first noted in Chapter 2 (section 2.6.2) and evidence was provided in Chapter 5 that, for participants, this formed a significant part of the importance of case study spaces. This aspect, however, represents a fundamental challenge to existing representations of value, as authors such as Choumert and Salanié (2008), for instance, make no mention of this temporal dimension. As highlighted in Section 2.5, others, such as Tibbatts (2002:8), have identified certain benefits based on the permanency and long-standing nature of park resources, stressing that these are “often elements of continuity, staying substantially the same when all around the built urban scene can change rapidly”. However, in this discussion, this permanency has most readily been connected to aspects of local rather than personal history, and, although aspects of local or community heritage featured in accounts of value, the importance of the past was most readily discussed in personal terms. As noted in Figure 7.6, in line with discussion of social structure above, Chapter 5 identified a spectrum of four past-related values, ranging from the individual use value of recollection to the most distant non-use value of societal heritage.

7.3.1 Recollection

In Chapter 5, recollection value was defined as the value attached to a park because it reminds someone of something they have done in the past, and it was noted here that the incidence of this was relatively high, with importance attributed by many participants on the basis of positive memories. The potential for individuals’ memories to feature in the significance attached to physical spaces was raised in Chapter 2, where connections were drawn to the

concept of place attachment and authors such as Rowles (1983), for instance, were identified as having discussed concepts such as reflective fantasy, noting that for an individual a place can represent both its current state and a series of remembered places at the same time. Where reflection has been identified in the discussion of place, it has been associated particularly by authors such as Rowles (1983) as a tendency of older residents (see section 2.6.2), raising questions as to whether high levels of reflection evident in responses resulted from the age makeup of participants. Exploration of this in Chapter 5, however, indicated that this was not the case.

Another aspect emphasised in discussions of the role of personal memories in place attachment is permanency, with authors such as Smaldone (2006) suggesting that those who have lived longest in an area are likely to have the strongest emotional bond to it. Rowles (1983) employed this same logic suggesting aspects of reflection were more prevalent amongst the oldest elderly people interviewed because they had demonstrated less residential mobility. In Chapter 5 no statistical connection could, however, be found between permanency and levels of recollection value attributed to case study spaces and questions can, therefore, be asked as to how readily this translates from consideration of the neighbourhood to a specific leisure resource such as a park. In qualitative accounts, the expression of this form of value was shown to be diverse. As noted in section 5.2.1, many individuals attributed importance to case study spaces on the basis of childhood memories; however, memories did not necessarily derive from experience in these resources in particular. Instead, for many individuals importance was attached to these arenas as triggers for memories of other spaces, suggesting that Rishbeth and Finney's (2006:287) proposition that urban parks serve as "starting points" for stories and nostalgia extends beyond migrant groups to the wider adult population.

Figure 7.6- Diagram of forms of value attributed to community parks following inclusion of a past temporal dimension

7.3.2 Socially-situated Heritage

As noted in Chapter 5, heritage value could be identified where individuals attached importance to case study spaces due to their position as a symbol or connection to a previous time. Given the history of urban parks as features of British urban environments, there is great potential for this, with the heyday of their provision identified as the Victorian era (see Chapter 1). Nevertheless, in spite of this, heritage value was not nearly as prevalent as recollection value. Here, much greater variability was also evident in terms of levels of agreement and, in contrast to recollection value, significant correlations were identified between this form of value and age, with older respondents significantly more likely to agree that public parks represented symbols of a previous era. In qualitative accounts, this form of value was connected to traditional design elements and thus the association identified may result from older residents having a better understanding of these symbolic aspects.

In spite of relative lack of attention to heritage value, as demonstrated in Figure 7.6, this form of importance could, nevertheless, be identified as being socially-situated, in line with other temporal dimensions of value discussed in section 7.2.3. As noted in section 5.2.2, the levels of emphasis varied, with much less prevalence in relation to Manston Park compared with Pudsey Park and, while heritage value was identified at the societal level in relation to Pudsey Park, this form of value was most readily expressed in relation to the community across both spaces. The divergence in levels of reference also gave rise to greater diversity in focus in

terms of community heritage as, while a sense of the space being handed down in functional terms between generations of communities was identified in relation to both spaces, in Pudsey, the heritage aspects of the park were also connected to local identity. The identification of these different aspects of community heritage chimes well with discussions of place attachment, noted in section 2.6, where authors such as Brown and Raymond (2007) have highlighted the importance of both place dependence (i.e. the functional elements of a locale) and place identity (the emotional meanings associated with an area) in determining attachment to a neighbourhood.

Although Figure 7.6 also includes a representation of family heritage, in accounts of value very limited attention was paid to this facet by participants, with few relating to case study spaces as symbols of their own family heritage. The under-emphasis of the family sphere could appear somewhat curious given the aforementioned weight placed on it in other temporal dimensions. But, this could in part be due to a lack of attention to heritage value in general. Levels of residential mobility experienced by many adults throughout their lives may also play into this under-emphasis in some way. While the 'community' and 'society' as social spheres both had a history within case study areas, given trends in mobility, there was great scope that an individuals' family had not been resident in the area or made use of a case study space over generations. Potentially, there was therefore no history of the family collective connected to the particular case study space. While this could be compensated for in relation to recollection value by the use of spaces as triggers for personal memories of other spaces, the scope for this is much more limited for family members' memories, because these memories are not readily accessible to individual and, even where they have been passed down the generations, members of the younger generation are likely to be much less familiar with them.

7.3.3 Comparative Values

While the past-related values identified in Figure 7.6 offer a useful addition to current framings of the importance of community parks, values were not solely restricted to this temporal horizon. As discussed in section 2.6.2, Lowenthal (1985) has suggested that the past is necessarily viewed through a present lens and, in line with this suggestion four comparative values were also identified in Chapter 5. Lowenthal (1985) also stressed that the past cannot be viewed neutrally and this also manifested in the identification of these comparative values as one, improvement value, was shown to positively contribute to the significance attached to

case study spaces, while three, nostalgia, perpetuation and obsolescence, were noted to negatively impact current appreciations of importance.

As highlighted in Chapter 5, the most prevalent comparative value evident in accounts of importance was nostalgia and, here, a positive memory of a past experience was seen to impact negatively on the current importance attributed to a park because it was associated with a sense of loss, or a notion that things were better in the past. Nostalgia has been readily associated with the idea of locality in the past and, as discussed in Chapter 2, it has been suggested by authors such as Forrest (2008) that a “selective nostalgia” permeates discussion of the idea of ‘neighbourhood’. For Rowles (1983) nostalgia was a necessary feature of older people’s views of their neighbourhood. Importantly, however, the potential for this to be a result of his focus on place attachment in communities in decline was raised in section 2.6, and, in line with this, in contrast to Rowles’ (1983) assertion nostalgia was not ubiquitous to older residents. Many, for instance, drew on recollection value, recounting associations of positive memories with case study spaces and, even where a comparative view was taken, there were several instances of nostalgia’s exact counterpoint, improvement value.

There were also incidences where a negative view of the past translated into a negative impact on the current importance of a space (negative perpetuation value), although these were relatively uncommon. This may have been because, in accordance with discussion of qualitative methods in Chapter 3, individuals appeared less inclined to share accounts of negative sentiments. Although least common, negative perpetuation value was, nevertheless, evident where individuals had negative memories of situations which, having not visited recently, they believed to continue into the present day. The counterpart to negative perpetuation value at the non-use end of the value spectrum was obsolescence value, where the heritage aspects of case study spaces were viewed as indicative of the space being out-dated. As noted in section 5.3.2, here, reference was made particularly to the leisure pursuits of young people and the predominance of technology over physical activity. The emphasis on this is, however, somewhat at odds with the identification of teenagers as a key user group of case study spaces and the second of these aspects was much more predominant.

As acts of active comparison, all 4 comparative values mentioned above are represented as arrows in Figure 7.7. Their impact on current value is also made clear in this representation with positive (+) and negative (-) signs included in the diagram. Obsolescence value is represented twice as there is potential for this to occur in relation to both the community and

society social spheres, where, for instance, the space is seen as out of touch with the needs of local young people and young people in general. In theory, this could also be the case for related young people, warranting its inclusion in the family sphere, but there was no specific incident of this in data and this arrow is therefore omitted from Figure 7.7.

7.3.4 Continuity between temporal values

A further challenge to existing framings of value is extensive evidence of continuity between different forms, particular different temporal dimensions. While both the present and future have been acknowledged in previous understandings of importance, there has been little discussion of how these may relate to each other and on the identification of past-related values, continuity was ever more evident. Logically, this connectedness may be expected between values that are temporally contiguous. For example, those who place great value on a park for its direct use in the present may be expected to use it in the future and, as Ward Thompson *et al.* (2008) have already noted, those who have made use of green spaces during childhood are significantly more likely to make regular use of this type of resource in their adult years. However, evidence presented in Chapter 6 suggests continuity to be more complex, with recollection value not only informing values in the present but also impacting both individual and socially-situated elements of value in the future. Several participants, for instance, connected recollection with option value, predicting their own use when they had grandchildren or children because they had used parks during their own childhood. In many instances, these connections also crossed the previously defined division between use and non-use values as individuals also presented recollection as the rationale for the incidence of bequest values, particularly in relation to their own children or grandchildren. These temporally non-contiguous connections are represented by arrows in Figure 7.7.

In the course of this study, two further challenges to existing framings could be identified. While those explored until now have necessitated the physical reforming of representations of value, resulting in Figure 7.7, the two final challenges are not readily represented in diagrammatical form and instead represent developments to understandings of how the importance of community parks can be understood. These contributions relate to the appreciation of negativity in accounts of value and the role of spatial comparison in understandings of importance. These are explored in turn below.

7.4 Understanding value as both positive and negative

The potential for negativity to be a key consideration in accounts of value was raised in Chapter 2 (section 2.6.1) in discussions of connections to the notion of place, where it was noted that previous framings of importance, such as those by Tibbatts (2002) and Choumert and Salanié (2008), offered solely a potentially partial, positive view. Other typologies mentioned in section 2.3, such as CABE (2001), did acknowledge that costs or detrimental elements could be important but presented them as separate from positive elements. However, as analysis presented in Chapters 4 and 5 has highlighted, this is not representative of the decision-making processes of individuals. As stressed in section 4.4, for many, negative aspects are traded-off with positive elements and are thus integral to any overall assessment of value. Negative values were readily identified in relation to present values and, section 4.4 underlined this point particularly in relation to direct use value, where negative perceptions were acknowledged as limiting this form of value in both functional and more emotive terms. Chapter 5, however, also emphasised the role of negativity in accounts of past-related value, noting both the positive and negative effect that this can have in terms of the current significance attached to a resource. In spite of this, importantly, in contrast to other temporal dimensions, negativity is unlikely to play a role in future values. In terms of bequest, for instance, it is unlikely that people would suggest spaces would impact people in a negative way, instead, negative sentiments in the present or past would more readily lead to apathy in terms of future provision, leading to an absence of value at the future level.

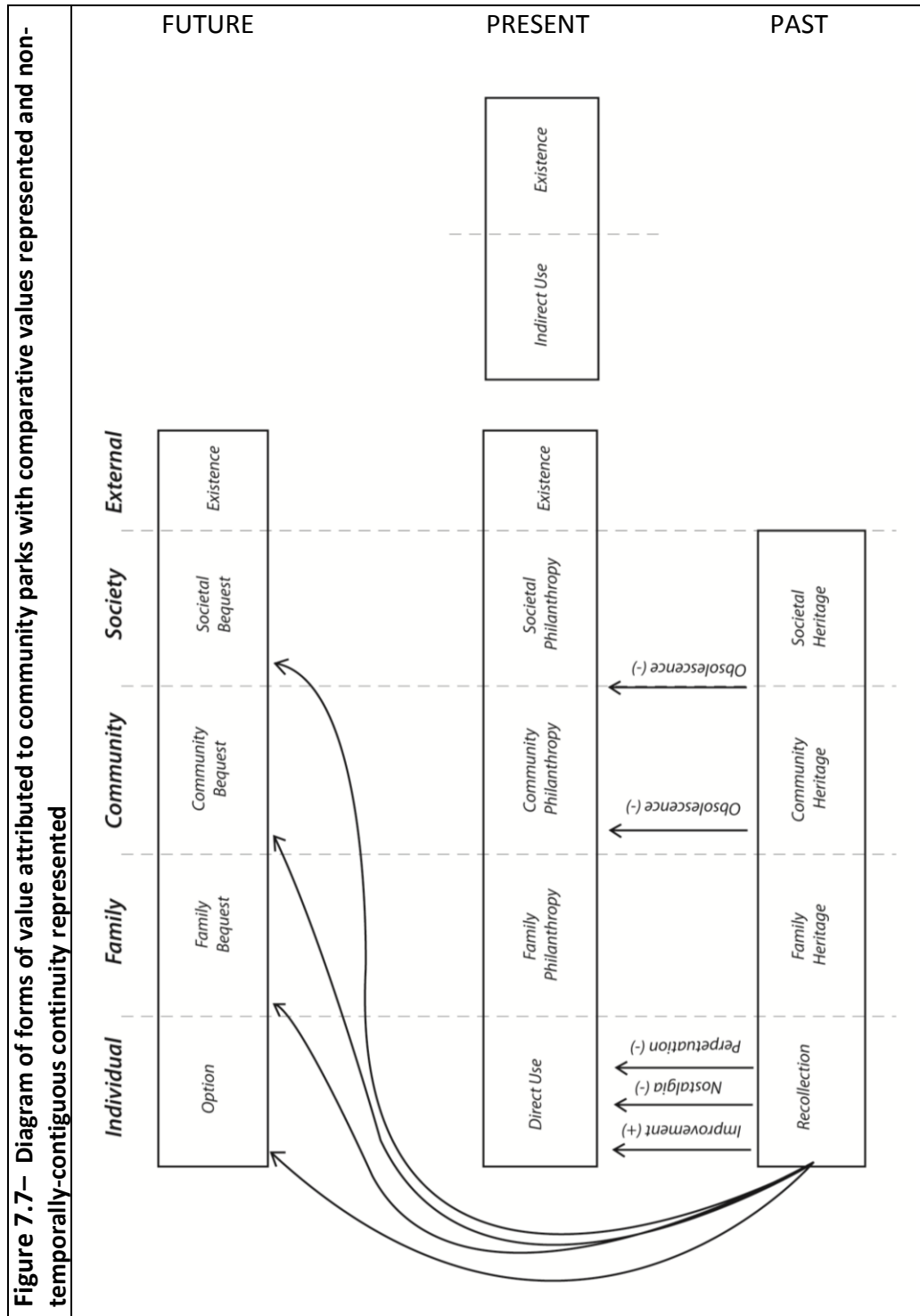
Despite the potential noted in section 2.6.1, there was little evidence of negative aspects of indirect use value, related, for instance, to negative neighbourhood reputation. However, the dominance of this aspect may have been limited by levels of maintenance in case study spaces (discussed in more detail in section 7.6). Nevertheless, even in spite of this, indirect use value, in general, did not feature highly in accounts of importance (see section 6.4.2). Instead, negative aspects of value were predominated by references to direct use. As discussed in Chapter 4, this is perhaps because, in common with negative accounts of home mentioned by Mallet (2004), negative accounts of value in relation to community parks centred on individuals' personal experiences. Nonetheless, negativity was not a hugely dominant aspect of value. As mentioned in Chapter 2, Maas, Spreeuwenberg *et al.* (2009) have suggested, in contrast to other authors mentioned above, that green spaces only promote feelings of insecurity in the most urban areas. This study, however, casts this suggestion into doubt as,

even in spite of the aforementioned quality of parks (and their position approximately 4 miles from the city centre), aspects of uneasiness were still engendered amongst participants. As noted in Chapter 2, authors such as McCormack *et al.* (2010) have highlighted the two facets of poor park maintenance and perceived safety as highly influential on levels of use of green space resources and, in the course of this study, fear, predominantly of teenage antisocial behaviour, and thresholds of maintenance, particularly in relation to dog fouling, were emphasised by participants as the key limits to direct use.

In line with Ward Thompson's (2002) suggestion, noted in Chapter 2, for some, urban parks were associated with a certain level of fear or anxiety and, as shown in section 4.4, references to fear were prevalent in negative accounts of case study spaces. Connections between levels of fear and the environment have been identified by authors such as Pain's (2000) with the suggestion made that fear of physical attack is the most dominant fear. While this was evident amongst participants in this study, given the focus on teenagers, narratives of fear were extended to other forms of intimidation, including verbal aggression. Section 2.5.2.i highlighted vegetation density as potentially influential on levels of uneasiness, as authors such as Bjerke *et al.* (2006) have noted spaces with closed vegetation as more threatening given issues of the visibility of predators. This aspect did not, however, feature in negative accounts discussed in Chapter 4. Instead, where visibility was discussed, this was in relation ambient light levels, leading participants to identify threatening behaviour and fear with specific times of day, such as the early evening.

Accounts of fear cited in Chapter 4 were most clearly associated with teenagers and young people because, as represented in Figures 4.6 (a and b), this group was readily associated with the incidence of antisocial behaviour by participants. Questions can, however, be raised as to the validity of this association, given the focus on adult perspectives in this study and the relatively limited voice thus given to teenagers within data presented (see section 7.6.1). Teenagers have, however, formed the focus for many green space studies, particularly in relation to affordance and social interaction and, while the representation of this group may have been inaccurate amongst adults in this study, the association with antisocial behaviour was still made. Significantly, it was this perception, rather than any evidenced fact, which placed limits on direct use value as participants practiced avoidance behaviours in order to avoid perceived threats.

The main negative value related to the functional capacity of case study spaces was associated with dog fouling. As noted in Section 2.5.2.i, authors such as Maas, Spreeuwenberg *et al.* (2009) have highlighted visual markers of “disorder” such as graffiti and littering as deterrents to use and, although researchers such as Bjerke *et al.* (2006) have emphasised thresholds of maintenance, little mention has, nevertheless, been made of dog fouling as a limiting factor to use in the literature to date. Clear connections could, however, be drawn between the way in which this was discussed as a problematic aspect by participants and literature on affordance mentioned in Chapter 2. Here, authors stressed green spaces were viewed in terms of the scope for activities that these arenas offered, with emphasis placed, for instance, on the open space they provide and authors such as Heft (2010:25) stressing that these areas “entice children to run”. As noted in Chapter 4, however, at certain levels, dog fouling was seen to remove this affordance with children and sportspeople unable to play on grassed areas in case of encountering it.



7.5 Understanding value as spatially relative

The discussion of negativity above highlights the trade-offs inherent in the way in which participants assigned value to case study spaces. It is, however, important to recognise that these processes of 'weighing up' did not occur in a spatial vacuum, with resources readily compared in terms of both affordance and meaning with other leisure facilities and green spaces in the area. While it cannot be represented diagrammatically, this spatial relativity has not readily been considered in discussion of the value green space resources to date.

Connections can nevertheless be drawn, here, to the questions of substitution between leisure resources, raised in section 2.5.2.iv. It was highlighted in Chapter 4 that spaces were most readily compared in terms of accessibility & affordance and these aspects have already been identified as key motivators for direct use. Spatial context is nevertheless a vital consideration as substitution of use must be possible. Tolerances for, for instance, changes in negative values mentioned above would likely be much higher, if there was no alternative resource as, here, use would be motivated by need rather than choice, in accordance with participant perceptions.

In this study, nonetheless, comparison featured as a key part of the way in which value was attributed. As demonstrated in Chapter 2, for the most part, where comparison has been discussed in explorations of the importance or benefit of green spaces, significance has been placed on distinctions between public parks and private gardens. Coolen and Meesters (2012), for instance, retained this focus, emphasising the differences in both affordances and meaning attributed to these arenas. On the whole, however, as noted in Chapter 4, private gardens were not seen as natural substitutes for case study spaces, as many of the benefits accrued were discussed as different in character. In accordance with Barbosa *et al.*'s (2007) suggestion that private and public green spaces serve distinct social roles; accounts of this divergence were centred on social activities. Some potential for substitution was, nevertheless, evident, where individuals did not make use of case study spaces for social purposes. For example, this was the case where participants emphasised the elements of nature present, although subtle differences were often identified here with the quality of spaces stressed. Subtle variation could also be noted where common meanings were expressed, and, in line with Hammitt's (2002) claims, any aspects of privacy identified in relation to case study spaces were characterised as different from those derived in the setting of a private garden.

As noted in Chapter 4, comparison was most readily evident where participants discussed commonalities between case study spaces and other public resources and, in accordance with Kazmierczak and James's (2007) emphasis on the status of parks as free and accessible, contrasts were readily made here in relation to cost of access and the scope for spontaneous use. Elements of incomparability were, nevertheless, also expressed where participants identified aspects that they felt couldn't be traded off. This was particularly apparent where the role of these community parks was discussed in relation to larger city parks. The potential to express these aspects of incomparability constitutes a strength of the mixed methods approach employed in this study. As discussed in section 2.3, authors such as Lockwood (1999) have noted the non-inclusion of scope for non-compensatory preferences as a major flaw in economic valuation studies, leading to skews in data collected such as protest zeros. The integration of quantitative methods with qualitative elements in this study, however, ensured that any aspects of incomparability in non-economic value were readily expressed.

The discussion above highlights a number of factors which appear to differentiate individual accounts of the non-economic value of urban parks from those previously determined in relation to firms or communities, thus raising questions as to the transferability of value insights between scales and types of resources. In Chapter 2, a high level of variability was evident in discussion of value, as it was noted that the focus of accounts varied ranged from green spaces to those of the built environment in general. While it was already highlighted in section 2.2.2 that certain values such as exchange value, identified in the most general accounts, did not readily apply to public parks, the incomparability of community parks with larger spaces noted in Chapter 4 casts the transferability of other aspects into doubt. Authors such as Burgess *et al.* (1988) have emphasised everyday green spaces as those of the greatest importance and, while this study cannot make that strong a claim, there are indications that more everyday spaces are, at the very least, valued in a different way, with accounts heavily nested in both spatial and personal context.

7.6 Study limitations

The emphasis of context in the above discussion raises question as to the generalizability of insights gleaned in this study and provides scope for the discussion of caveats that must be placed on conclusions drawn. Throughout analytical chapters pointers have been given to specific limitations in analytical techniques, with attention paid especially to any statistical issues that may have arisen. In preceding chapters, the limitations identified have largely taken

two forms, with the first of these noting constraints due to dataset size. In spite of good response rates, case study datasets obtained remained relatively small in size (with 140 and 153 representing n values in relation Manston Park and Pudsey Park respectively), restricting the analyses that could be conducted and thus, for instance, while it may have been preferable to employ multinomial logistic regression this was not possible (see section 4.3.2) and, instead, recoding was carried out to allow for binomial analysis. The second form of statistical issue raised noted problems of reliability in the methods employed, with attention paid here, for instance, to the reliability of R^2 values in logistic regression (see section 4.3.2) and the potential for a 'third variable problem' in correlation analyses (see section 6.3.1).

While a number of specific strategies were adopted to overcome each of these issues, the mixed methods employed in this study also served to minimise their effects as qualitative insights can be explored in corroboration, or not, of suggestions made from quantitative analysis. It should be stressed that this cannot be deemed triangulation in the strictest sense as despite every effort to overcome the tendency for quantitative and qualitative methods address slightly different phenomena, these elements were not always fully complementary. For instance, Likert scale items focused on public parks in general were included in resident questionnaires. While levels of agreement with these items could not be seen as case-specific expressions of value, they could, nonetheless, be considered indicative of broader participant attitudes to urban parks and there is reason to believe that an attitude held in a general sense may well translate to a smaller scale. Furthermore, care was taken to not place too much analytical weight on these elements in drawing conclusions, and, where relationships were identified, these aspects explored further in case-specific qualitative data.

As noted in Chapter 3, it is the intention of this study to generalise on theoretical rather than statistical grounds and, thus, the following sections focus on limitations that might cast this alternative form of generalisation into doubt. One element that might play into this issue is the focus of this study in one city. While the transferability of contextualised insights is a key concern associated with case study methodologies in general (as noted in section 3.2), the emphasis on context in the contributions to understanding noted above may add weight to this criticism. Nevertheless, the restriction of attention to one city was necessary to thoroughly interrogate the relationship between use and non-use values in parks with increasing and decreasing use trends, within the timescale available. Other aspects can, however, be raised to question whether accounts of value as a whole have been overemphasised, whether sufficient

diversity within accounts of value has been acknowledged and whether the methods employed in this study have played down negative aspects of importance. These are explored in turn below

7.6.1 Overemphasising value

The primary way in which value may be overemphasised is through the response bias in resident survey returns. As noted in Chapter 3, it is difficult to obtain responses to postal questionnaires and, while this survey obtained a relatively high response rate (28% and 30% in Crossgates and Pudsey respectively), a large proportion of the community did not provide returns. The suggestion could thus be made that the responses obtained may overestimate the value of resources as only those who placed significant value on park responses would have been inclined to respond. Diversity was, however, present within forms of value, with variable levels of agreement and marked variability in, for instance, direct use value evident.

Furthermore, as discussed in Chapter 4, and more detail in section 7.4, a number of the values expressed by participants were negative and, while these were not a dominant part of accounts, their presence, nevertheless, minimised any potential for the overemphasis of positive importance. Seemingly, those not readily captured within survey responses (and their connected interviews) are those who feel antipathetic towards case study spaces. The significance of this omission is, however, questionable as, given the aim of the study to explore in more depth the character of value as it is expressed in relation to community parks, the accounts of those for whom it is absent are not theoretically pertinent.

The age distribution of participants in this study may also have served to overemphasise importance. As noted in Tables 3.3 a and b, the dataset obtained was vulnerable to the response biases common to postal survey, with older age groups overrepresented amongst respondents and younger adults thus underrepresented. Given associations drawn between age and reflection by authors such as Rowles (1983), this may have the effect of overestimating the significance of recollection as a facet of overall importance. On quantitative exploration in section 5.2.1, no significant relationship was identified between age and levels of agreement with the Likert item representing recollection value. Evidently, this item is vulnerable to issues already identified above in relation to agreement scales referring to public parks in general rather than case study spaces specifically, and care was taken not to overstate conclusions on this basis. However, much evidence of recollection value was apparent in qualitative accounts. While interviewees were derived from postal samples and a number of older residents were

thus included, purposive sampling was employed in an attempt to include as diverse a range of perspectives as possible and minimise biases carried over to the qualitative stage. It is worth noting here that, as identified in Chapter 5, although perhaps slightly more prevalent amongst older residents, accounts of recollection were drawn from both older and younger residents.

7.6.2 Underplaying the diversity in accounts of value

The focus on adult perspectives on value in this study could be seen to underplay diversity within individual perspectives on the value of community parks. As noted in Chapter 4, the direct use of case study spaces was heavily associated with teenagers but these users were outside of the scope of study and thus their positive perceptions of case study spaces could not be explored. Meanwhile, several residents also associated this age group with antisocial behaviour concerns. Preceding analysis could therefore be thought to provide a one-sided account of the behaviour of teenagers, giving them only a limited voice within data presented. Attention to adult accounts did not entirely preclude the inclusion of teenagers as postal samples encompassed those aged 18 and 19 and, as mentioned in Chapter 3, amongst interview participants, efforts were also made, through purposive sampling, to include the perspectives of these youngest adults. Nevertheless, those aged 13-17 were not included and these individuals would likely have had markedly different lifestyles, featuring different financial and practical constraints, than older teenagers which may well impact their accounts of the value of leisure resources. Moreover, these young people were widely cited as some of the most frequent users of spaces and it may, therefore, have been interesting to see how their understandings of value contrasted. The scope of the study was, nonetheless, wide-ranging in terms of age inclusion, examining the adult population in general rather than the inclusion of a particular social group. Furthermore, many of the contributions of this study in terms of significance, notably social situation and personal heritage, are aspects of relevance for all individuals, irrespective of age, and these thus remain important contributions to knowledge.

Given that Likert items served as a starting point for explorations of levels of value, little attention was also paid to users in this thesis, which could also be seen to minimise the diversity of perspectives. While it was noted in Chapter 3 that a number of user surveys were collected (80 and 47 in Pudsey Park and Manston Park respectively), questions of value were not readily explored in this data as Likert items could not be included in these survey instruments (given their vulnerability to interviewer bias where they are interviewer-

administered). Furthermore, the fleeting nature of their collection limited the possibility for collecting further qualitative data from user participants and, as noted in analytical chapters, much of the case-specific evidence of value was drawn from qualitative accounts.

Nevertheless, given the focus on the contrast between users and non-users and the targeting of these resources at local residents, the emphasis in this thesis on resident perspectives is not inappropriate. Had aspects of, for instance, indirect use value featured highly, the imperative to collect more user surveys and make greater use of them would have been greater as these could have been employed, for instance, to interrogate the tourism function of case study spaces, assessing how far individuals had travelled to make use of the space. This was, however, not the case.

7.6.3 Limiting negativity

As discussed in Chapter 3, the key point of distinction in the selection of community parks for study was their trends in use and effort was, thus, made to ensure that spaces were largely comparable aside from their use trends. On this basis, care was taken to ensure maintenance could not form a clear rationale for the divergence in use between spaces and both spaces chosen were therefore 'Leeds Quality Parks' having been judged to be particularly high quality in terms of maintenance and facilities by local authority. This may, however, have limited the scope for the expression of negative limitations on value. As noted in Chapter 4, many negative facets of importance were connected to aspects of design and upkeep, with dog fouling, for instance, associated particularly with grassed areas. Other concerns, such as litter, would likely have been more pronounced in parks not designated 'quality' spaces and aspects, such as flowers, may well not have featured so highly amongst aspects most liked in aspects most liked where levels of maintenance were lower.

Moreover, negativity may have been deemphasised by the manner in which data was collected. Given that negativity was not stressed in prior accounts of value, negative aspects were only explored directly in questionnaire data in one qualitative question asking respondents about the aspects of case study spaces that they liked least and the extent of limitation to direct use value thus only became clear in interview data. Evidently there was scope for greater interrogation of this element. Nevertheless, this still featured in accounts of value, thus suggesting its significance. Although negativity is noted as not dominant in specific accounts of value in these case studies, this thesis (see section 7.4) makes no comment on its dominance in general, simply identifying it as an important omission from existing

understandings of value. The suggestion that its significance may more dominant in relation to other spaces only adds weight to this assertion

7.6.4 Limitations of Interpretation and Approach

Invariably, in the course of any study, the research techniques and approach adopted alter the interpretation of data and it is important to acknowledge the limitations associated with this.

As highlighted in earlier chapters, the methodological toolkit of this study included questionnaires and a key point of debate could centre on the interpretation of categories in their analysis. In section 4.3.1, for instance, health-related drivers of park use were noted to be less dominant than might be expected. This suggestion was made on the basis that the incidence of those using parks 'to keep fit' was low and this represented the only rationale for visiting solely connected to health. While it was acknowledged that individuals could have benefitted health-wise from other practices such as walking and dog walking, these activities may have been motivated by other drivers such as social interaction and were thus not interpreted as health-related. Nevertheless, the conclusions drawn above represent only one perspective on this data and it is therefore feasible that through an alternative reading of these findings, health could be seen as a greater driver of use, particularly as the point made in section 4.3.1 centres firmly on physical health. From other perspectives, were health considered in its broadest sense, other categories of use, such as 'to get some fresh air' and 'for peace and quiet', may also have been considered health-related motivators for use.

The categorisation of activities in the course of social survey also placed limitations on forms of significance and types of activity that could be expressed. While the inclusion of an 'other' category allowed participants to add activities and thus describe more accurately their use of the space, in questionnaires, respondents were unable to indicate instances where they visited for multiple purposes. It is however entirely feasibly that individuals employed rationales in combination, getting, for instance, some fresh air whilst simultaneously looking to entertain the children and the responses gleaned may therefore have represented a more simplistic portrayal of use than reality.

Time has also been conceived of in a specific way in the course of this study and the implications of this should also be interrogated. On the basis of the critical realist epistemology identified and discussed in Chapter 3, this thesis adopted a realist interpretation of progression of time, viewing the relationship between the past, present and future temporal spheres as

highly linear. On this basis, it was possible to build on other more positivist work and a range of additional past-related values were identified which represent an important contribution to knowledge. Nevertheless, it should be acknowledged that the data presented in Chapter 5, for instance, could be interpreted through an alternative philosophical lens in which the divisions between past, present and future would be much more fluid. On this basis, markedly different conclusions may have been drawn as these temporal dimensions could have been seen as interdependent, co-constituting each other in individuals' understandings of value.

Questions can also be raised more generally as to the extent to which the epistemological position taken in this study may have limited the conclusions drawn. As noted in Chapter 3, the two key purposes of Critical Realism identified in the literature were: to more accurately explore causality and to obtain a more complete understanding of the world. This thesis has not readily engaged with the first of these aims. Nevertheless, the questions raised in section 3.3.1, relating to the judgement of explanatory power in accounts of retrodution, remain. It appears that there is still work to be done to understand how this perspective on causality can be operationalised effectively in practice. Nevertheless, drawing on its second aim, in the course of this study, critical realism proved a worthwhile basis to cohere insights drawn from diverse methods, enabling an appreciation of both occurrences and people's understandings and perceptions of these to be gathered.

In exploring the limitations of the study, the areas identified as those interesting for investigation can also be queried. In Chapter 2, this study positioned itself in contrast to top-down, economic perspectives on value which had previously explored the significance of larger park spaces for collective entities such as communities and firms. Seeking to advance knowledge, this research held the individual as the actor of interest, looking to understand how the significance of a park was articulated by a singular person. This thesis has pointed to a number of differences from these prior accounts of value, highlighting issues with extrapolation of insights from these accounts. The significance of social spheres identified in this work has nonetheless highlighted the connections between the individual and the collective. This may have been an interesting avenue for investigation and it cannot be overlooked that alternative more ethnographic approaches the investigation of this question may have had much to offer.

Further limitations may be identified where the notions of value and valuation are examined. As noted in Chapter 2, a branch of literature, drawing on ecological ethics, has questioned the validity of investigating anthropocentric value at all, seeing this as marginalising concerns with the intrinsic significance of nature and, while this study has done much to elucidate more fully the character of anthropocentric value, it does not break out of this dichotomy. Furthermore, other branches of study in cognate fields such as sociology have further deconstructed and critically interrogated the concepts of value and valuation. While this study has made worthwhile strides in casting a geographical lens on the exploration of value, identifying, for instance, its relational character, there remains scope to suggest that engagement with these alternative literatures on value theory would have produced alternative interpretations of data.

7.7 Conclusions

This chapter has situated insights gleaned in preceding analysis in relevant literature, presenting four fundamental challenges to previous typologies of the value of urban parks. Firstly, a diffuse distinction between use and non-use elements of value was identified, premised on references to the different social spheres of family and community, as well as society in general. Secondly, a plethora of past-related values, recognized in analytical chapters, were noted as having not previously been acknowledged. As a third area of omission, negativity was stressed as a key part of the significance attached to spaces which had been overlooked or minimised in prior benefit-centred accounts of the importance. Finally, spatial relativity was emphasised as a notable facet of accounts of value, as the importance attributed to community parks was premised on the accessibility and quality of other local leisure resources, particularly public facilities.

An alternative typology of value was thus proposed in Figure 7.7 to take account of these challenges presenting spectrums of socially-situated values across all three time horizons. The issues of negativity and spatial relativity were not, however, readily represented diagrammatically, constituting challenges to understandings of the way in which value is attributed, rather than representing forms of value in their own right. In addition to the above contributions, the above discussion has also explored the key limitations that must be placed on conclusions drawn. Where pertinent, specific theoretical issues have been elucidated, with attention paid, for instance, to whether the intrinsic importance of nature could have been underplayed (see section 7.2.2). However, for the most part, limitations centred on the

implications of methodological issues on the generalizability of findings. Here, considerations such as response bias and case study selection were explored and their scope to overemphasise the value of resources as a whole or underplay negative elements of importance discussed.

The chapter has, nonetheless, highlighted an emphasis on personal and spatial context in individual accounts of the value of community parks, setting these apart from accounts centred on benefits accrued to firms or communities. Here, value was discussed as inherently nested in emotional connections and experience. This was evident, for instance, where significance was intertwined with family and community relations. It was also apparent in past-related values, which highlighted the importance of community parks as embedded in individuals' lifecourses, communicating how this significance is reformulated and evolves over time, as competing lifestyle demands change. These elements pose problems for the ways in which value is conceived of at a most basic level. For the most part, prior accounts of value have discussed this as a feature assigned to the urban park as an external entity. However, the above discussion points to this being a 'relational' concept in a similar sense to affordance (discussed by Heft (2010)). Here, rather than representing a property assigned to an urban park, value can instead be understood as constituted in the interplay between an individual and their environment. These developments in the understanding offer a number of potential opportunities and knowledge gaps for future geographical work that are discussed in Chapter 8. Furthermore, given their status as publicly-provided public goods, a more nuanced understanding of the importance of these resources has important implications for policy which are also explored in the chapter that follows.

Chapter 8: Conclusions and Wider Implications

8.1 Introduction

The insights discussed in Chapter 7 provide clear additions to understanding of individual perspectives on the value of small-scale urban parks. However, broader policy-related and academic lessons can also be drawn from these contributions, and these form the focus of this chapter. As noted in the preceding discussion, this study has identified four specific challenges to existing value framings, which emphasise the significance of personal experience, comparison and social connections in the attribution of importance to neighbourhood resources. Nevertheless, the most crucial contribution to knowledge here has been the identification of value as a relational, rather than absolute, property. With this development in understanding, the importance of context has been emphasised as it is noted that individuals interpret the value of green space resources through a markedly less abstract lens than previously assumed. These aspects all have policy-related and academic implications which are discussed in detail below.

8.2 Insights for policy

As noted in Chapter 1, Localist and Big Society discourses, mobilised by the Coalition government, have created an era of change in park maintenance and management. When taken together with new funding constraints, these have created an appetite to reconfigure green space governance, with emphasis placed on funding generation and the voluntary involvement of communities. The insights discussed in Chapter 7, however, have a series of consequences for this agenda which are explored in turn below.

The emphasis of comparison in accounts of value has both strategic and practical implications. It was highlighted in Chapter 4 that, for individuals, green space resources can be viewed as a networked system (rather than in isolation), with ready comparison drawn between different scales of public green space. This elucidation is not, in itself, new, as policy arenas have already acknowledged green space substitutability, constructing green space strategies featuring multiple scales and types of green space resource, in order to ensure the optimum provision of public goods (as indicated in Table 3.1). Nevertheless, this discussion of comparison does offer some key strategic lessons.

The exploration of emotive connections to park spaces, provided in this study, has emphasised marked distinctions in the way in which different scales of park are conceived, indicating that these spaces play notably different roles in residents' lives. In Chapter 4, for instance, clear contrasts were highlighted between participant discussions of city-scale parks and those of community-scale spaces, with larger-scale arenas designated 'destination parks', associated with day-trips rather than more quotidian encounters. Similarities in affordance provide a strong logic for the inclusion of these spaces in the same strategic documents. Nevertheless, this study has highlighted that use (and its associated affordances) represents only a small part of the significance of a park resource, and on the basis of this broader value, greater comparability was highlighted between community parks and other forms of local leisure arena, such as leisure centres and children's play facilities.

This finding points to a need to rethink how community parks are situated strategically. Here, local leisure strategies may be required to more readily understand how separate green space and culture and leisure strategies integrate at the local level. This is of particular significance in the face of austerity measures, where councils are looking to economise, as there is an increased drive to prioritise resources on the basis of the local need and, while, in economically constrained times, substitution between leisure resources may be desirable, this can only be encouraged where these entities are truly comparable. This study suggests that, for individuals, this comparability is heavily situated in local context.

The emphasis on local context, discussed above, also has implications for the push towards increased community voluntarism, suggesting that some community involvement in the management of small-scale parks could prove fruitful in ensuring that these leisure facilities meet local needs. Given the findings of this research, there is however scope to be sceptical as to whether the extent of voluntary involvement desired by policy officials is in fact achievable. In the course of this study, despite garnering a broader sense of the significance of these spaces, adding for instance recollection and heritage values, for many individuals, the importance of case study parks was detached from any physical presence in these spaces. While they may value the park, it seems unlikely that current non-users could be sufficiently motivated to not only visit the space but to do so for the purpose of maintaining it. The association of use with specific user groups discussed in Chapter 4, further impedes this involvement as there is potential that little direct benefit would be seen to accrue to potential volunteers who did not fall into these categories.

While the above points to a need to not overestimate the engagement of non-users in voluntary maintenance, findings also highlight that caution is required in attempts to increase revenue and widen the appeal of community parks. For many years, the desire to maximise visitor numbers has provided an impetus for green space managers to improve park resources. In this endeavour, however, policy officials must strike a fine balance between drivers to modernise facilities and a desire to retain continuity with what has gone before. Where this is inadequately negotiated, there is scope for community resistance which may impede voluntarism. This study has identified a range of previously unexplored past-related values, including some, such as nostalgia, which were attributed on the basis of specific design elements, such as playgrounds. While, as noted in Chapter 1, the present era offers a prime opportunity to 'rethink' parks, the identification of the above highlights the need for a cautious approach in this process, stressing the scope for potential flashpoints in any modernisation, and emphasising that care must be taken to reimagine park spaces in a sensitive way, which does not inadvertently diminish their current significance.

These lessons possess some relevance for other forms of public infrastructure as other elements, such as libraries and schools, face a precarious future, having undergone transformations in their governance. Similar to local parks, the success of many of these resources has previously been explored in functional terms, with school success, for instance, premised on student numbers and exam achievement. The elucidation of a broader sense of value in this research, however, opens up scope for the significance of these resources to also extend beyond functional appreciations. In many instances, these local resources, like parks, represent longstanding features of local communities and thus may well be subject to similar contextual embedding. In the context of schools, for instance, many new academies have emerged out of mergers of previous educational environments and questions can thus be raised as whether emotive associations based on past experience or community heritage have the scope to impede community involvement

In spite of the above, the finding that individuals engage with parks spaces in a markedly less abstract way than previously thought does offer some insight for those looking to facilitate the transition towards Localism and the Big Society. Throughout this thesis, participants have closely connected the significance of park spaces to their own social spheres and there may be scope to operationalise these aspects of value to encourage voluntarism. Many participants, for instance, connected the value of the park to their family. While the importance of parks for

children in general has long been acknowledged and utilised in campaigns to generate support, given the findings above, greater voluntary motivation may be engendered where individuals are offered the chance to see this activity as a means to provide for their *own* (present or future) children. Invariably, there may be challenges in operationalising such a suggestion in a practical context, not least due to the qualitative nature of this insight. As highlighted in Chapter 3, policy circles are acknowledged to have a preference for quantitative forms of evidence and, where this is the case, discussions of family narratives may go overlooked. Critical realism, grounded theory and study design have, however, provided a strong basis for the integration of qualitative and quantitative evidence provided in this study and this may thus enhance the usability of this insight for policymakers.

More generally questions can nevertheless be raised as to whether moves towards Localism and voluntary involvement offer a desirable direction for park management specifically, and their position as non-rival and non-exclusionary public goods brings this into doubt. Where provided by local authorities, the scope for spillovers to become problematic is limited as the benefits of such spaces accrue largely to the city population. Where responsibility for their provision falls to local communities, however, there is increased potential for the quality of such spaces to vary. Where this is the case, the potential for injustice in their provision is increased as members of other communities may travel to make use of quality park spaces that they have not contributed to maintaining. In turn, the exclusion of those unable to travel could also be exacerbated where the quality of spaces local to them is not maintained. Furthermore, findings on temporality suggest that where the quality of parks is allowed to decline, this is likely to long-reaching repercussions for future levels of engagement with green spaces.

8.3 Academic implications and future directions

In addition to the policy-related insights identified above, academic implications also result from the approach employed in this study and the conclusions drawn, in many instances, offering avenues for future research. In recent years, public space research within geography has focused on garnering critical perspectives, centring on the oppositional characteristics of public space and exploring questions around its role in shaping exclusion and individuals' political expression (see, for instance, Staeheli, 2010; Fincher and Shaw, 2011; Day Biehler and Simon, 2010). However, standing in marked contrast to this, this study has highlighted urban

parks as a highly pertinent field of geographical enquiry on the basis of their leisure provision. Here, associations, drawn in preceding chapters, between the value of these arenas and childhood experience can be readily aligned with Tuan's (1977) conceptions of both 'place' and 'space' (discussed in section 2.5). On this basis, community parks, and urban parks more broadly, can be seen to signify key grounds in the neighbourhood where these conceptual entities coalesce, engendering sentiments of security or attachment and a sense of freedom simultaneously. Leisure spaces such as these thus represent important conceptual nexuses offering fertile ground for further work.

The diversity of methods employed in this research has highlighted the mixing of methods as a fruitful endeavour in explorations of the value of urban green space and there is scope to extend this further in the future. As noted in Chapter 7, Critical realism has been shown to offer a useful philosophical basis for the combination of observation, social survey and interview methods and for the integration of analytical insights drawn from these. Alternative combinations of methods could however elucidate other perspectives on the value of urban green space and act as a way of adding further coherence to this body of evidence. This study has, for instance, brought together diverse literatures, including those centred on health and those on place attachment, to explore the significance of park as a whole, but, as noted in Chapter 2, another branch of literature, coming out of the design field, has explored value in terms of specific attributes, seeking to break value down into constituent elements of a space. This could offer a productive area of mixed method investigation.

The main method associated with this body of work is choice modelling which produces sophisticated quantitative outputs. There is however scope to mix this method with other qualitative strategies of investigation. As noted in Chapter 2, in the course of choice modelling, individuals are asked to trade off aspects of spaces to express those on which they place the greatest significance. This could however usefully be combined with participant-produced photography and follow up interviews. Interviews involving participant-produced photographs could offer deeper insights into value at this smaller scale and the extent to which photographed elements aligned to attributes deemed significant quantitatively could be explored. Here, one can only speculate as to whether connections drawn to temporality and social connections would persist, when individuals were readily encouraged to consider the significance of a space as connected to a photographable element, fundamentally nested in the current physicality of the space rather than the leisure resource as a whole.

Invariably, the approach adopted in any study can also point to future directions for research. In this study, the focus on investigating the relationship between use and value prohibited the exploration of other aspects such as quality of experience and physical park quality, with both spaces representing relatively high quality spaces. While studies into connections between use and both quality and other aspects such as satisfaction have been conducted, often by local authorities, little has been done to connect work on quality with discussions of value. Insights drawn in this study suggest aspects of value, such as recollection and improvement, to be highly connected to the physicality of case study spaces, focusing for instance on play facilities, and, on this basis, it may thus be assumed that spaces of lower physical quality would be considered less valuable by those who use them and reside around them. Negative values focused on poor physical aspects, such as graffiti, litter and dog fouling, may also be assumed to be more prevalent but the evidence base for these assertions must be developed.

A further limit of the approach in this thesis which offers a further avenue for research relates to class. Both case studies explored in this research were situated in middle class areas and, while this was an underexplored context to this point, a comparative analysis of the significance of community parks across neighbourhoods with more diverse socio-economic backgrounds could provide interesting insights into the generalizability of findings provided here. A study of this design could also be used to interrogate more fully assumptions surrounding the propensity of individuals towards voluntary activity. As Reed and Selbee (2001) have highlighted the middle class are considered the 'civic core' representing those most likely to engage in charitable giving and voluntary involvement yet, in spite of this, as noted in the discussion of policy above, there is great scope to question levels of volunteering. This limitation is likely to be even more acute in lower income areas; however, this has not yet been examined.

As noted in section 8.2., drawing on similarities in the affordance of resources, in the course of this study, participants readily compared case study parks with other leisure arenas. Questions can, however, be raised as to whether insights into aspects of the broader value of parks are equally transferable and this offers an interesting avenue for future research. In preceding chapters, recollection of the past has been shown to form an integral part of park significance. Here, narratives of park value have been closely connected to childhood, with the use of parks closely associated with this life stage and many accounts underlining, for instance, the

significance of play. Questions can however be raised as to whether significance of previous experience is retained where the importance of other leisure resources is explored.

Tuan (1977) has suggested that childhood offers some of the most vivid sensory experiences and it can thus be debated as to whether it is this superior sensory perception that underpins the extent of recollection value identified in relation to local parks. It would therefore be interesting to explore narratives of value for other leisure resources, such as bowling alleys or cinemas, for which use is not so heavily intertwined with childhood. Some arenas, such as skate parks, are also associated with a different life stages and these could represent a further aspect of enquiry. The meshing of prior experience and value in accounts of park significance may also be enhanced by the everyday nature of these spaces and future work could thus also investigate the significance of other, less every day, leisure resources, such as museums, to ascertain whether the deep connection drawn between value and personal experience remains.

The identification of social spheres in structuring accounts of the value of community parks represents a key contribution of this study, acting as a notable point of contrast with existing understanding. Here, a high degree of altruism has been highlighted, centred on the social spheres of family and community, and this has brought the consideration of social connections to the fore, offering a number of worthwhile avenues for future enquiry. Questions can, for instance, be raised as to whether the dominance of attention to particularly the family sphere derives from associations with childhood (mentioned above) or whether the incidence of this is more widespread. Theoretically, there is scope for attention to family to form part of the significance attributed to a wide range of local social and green infrastructure, with many of these arenas, such as hospitals, schools, allotments or community gardens, having equal potential to have been (and continue to be) sites of key life events. However, the extent of this is unknown and this aspect thus warrants further attention

Problems can also be raised in relation to the framing of value in terms of social spheres where those who sit outside of traditional social structures are considered. The association of value with social connections raises questions as to whether those who are socially isolated are inherently less likely to attribute value to local resources and, although this group is difficult to access, an investigation of this could prove insightful. Furthermore, park spaces have been associated with traditional conceptions of family and similar questions can therefore be raised regarding those with non-traditional family structures. Variability may also be prevalent in the

community facet of value, particularly where contrasts with other forms of green space are considered. Parks, such as those considered in this study, represent relatively passive recreational spaces, as visitors have relatively little active influence over the character of the space, and associations may thus be drawn to the social spheres of family and community as these spaces essentially represent arenas for life to play out in. Feasibly, narratives of value would be notably different and values at the personal level emphasised in relation to other green spaces, such as community gardens, where community members are actively involved in shaping the inherent features of a space. Community gardens have, however, also been associated with increasing sense of community within neighbourhoods and thus it is equally possible that accounts of value may be more rooted in social spheres and local context on this basis. This warrants further enquiry.

Finally, the acknowledgment of value as a relational property requires further investigation as this development to knowledge provides scope for evolution in value to occur over time. Throughout this study, for many participants the passage of time was associated with moving through life stages, with substantial reference made to parenthood and grandparenthood in addition to childhood (mentioned above). There therefore appears to be a need to more fully interrogate connections drawn between value as a conceptual entity and the life course. Within geography, a number of researchers, particularly in health and population geographies, already place emphasis on transitions through the life course and work conducted in these areas offers potential lessons for the extension of this idea into infrastructural value. Here, for example, in recent years a raft of, largely quantitative, work has emerged which draws on longitudinal approaches (see, for instance, Malmberg, Andersson and Subramanian (2010); Finney (2011); Boterman (2012) and Coulter (2013)). While, given the diversity in the concept highlighted throughout this thesis, more mixed methodological designs would have to be employed to explore the notion of value in its fullest sense, a longitudinal approach to value may offer a fruitful avenue for future research, allowing the interaction of the aspects of personal experience, social connections and comparison to be assessed over time, gaining an understanding of how the interplay of these factors may alter the significance attributed to green and social infrastructure.

Appendices

Appendix 1: Ethics Approval Form



University of St Andrews

University Teaching and Research Ethics Committee

School Of Geography And Geosciences

23 June 2011
Alice Oldfield
Geography and Geosciences

Ethics Reference No: <i>Please quote this ref on all correspondence</i>	GG7696
Project Title:	The importance of the local: uncovering the social value of the community park in the modern neighbourhood
Researchers Name(s):	Alice Oldfield
Supervisor(s):	Duncan MacLennan and Donald Houston

Thank you for submitting your application which was considered by the Geography and Geosciences School Ethics Committee. The following documents were reviewed:

1. Ethical Application Form	23 June 2011
2. Participant Information Sheet - Resident Interview	23 June 2011
3. Participant Information Sheet - Policy Stakeholder Interview	23 June 2011
4. Respondent briefing note- User Questionnaire	23 June 2011
5. Respondent briefing note- Observation	23 June 2011
6. Participant Consent Form- Anonymous Data	23 June 2011
7. Participant Consent Form- Coded Data	23 June 2011
8. User Questionnaire	23 June 2011

The University Teaching and Research Ethics Committee (UTREC) approves this study from an ethical point of view. Please note that where approval is given by a School Ethics Committee that committee is part of UTREC and is delegated to act for UTREC.

Approval is given for three years. Projects, which have not commenced within two years of original approval, must be re-submitted to your School Ethics Committee.

You must inform your School Ethics Committee when the research has been completed. If you are unable to complete your research within the 3 three year validation period, you will be required to write to your School Ethics Committee and to UTREC (where approval was given by UTREC) to request an extension or you will need to re-apply.

Any serious adverse events or significant change which occurs in connection with this study and/or which may alter its ethical consideration, must be reported immediately to the School Ethics Committee, and an Ethical Amendment Form submitted where appropriate.

Approval is given on the understanding that the 'Guidelines for Ethical Research Practice' (<http://www.st-andrews.ac.uk/media/UTRECguidelines%20Feb%2008.pdf>) are adhered to.

Yours sincerely
Dr. Sharon Leahy
Convenor of the School Ethics Committee

UTREC School of Geography and Geosciences Convenor, Irvine Building, North Street, St Andrews, KY16 9AL
Email: ggethics@st-andrews.ac.uk Tel: 01334 463897
The University of St Andrews is a charity registered in Scotland: No SC013532

Appendix 2: Case Study Selection Tables

Table A2.1 provides a full list of the 63 community parks managed by Leeds City Council at the time that data collection for this study commenced in August 2011. Leeds Quality Parks are given in bold and case study spaces are highlighted in grey.

Table A2.2 offers a matrix of information used to compare community parks in the selection of specific case studies.

Table A2.1 – Community Parks in Leeds, West Yorkshire		
(Source: David Hayes, Quality Manager, Leeds City Council Parks and Countryside Department, personal communication)		
Allerton Bywater Sports Ground	Grove Road Recreation Ground	Penny Pocket Park
Armley Park	Hainsworth Park	Potternewton Park
Banstead Park	Halton Dene - Primrose Valley	Pudsey Park*
Barleyhill Park	Harehills Park	Rodley Park Recreation Ground
Becketts Park	Hartley Avenue Park	Rothwell Country Park
Blenheim Square	Holbeck Moor	Scarth Gardens
Bramley Falls Wood Park	Holt Park	Scatcherd Park
Bramley Park	Horsforth Hall Park	Springhead Park
Burley Park	Hunslet Lake	Stanningley Park
Calverley Park (Victoria Park)	Hunslet Moor	Tarnfield Park, Yeadon
Chapel Allerton Park	Kirk Lane Park	Tennant Hall, POS
Churwell Park	Lewisham Park	The Hollies
Cranmore Recreation Ground	Ley Lane	The Rein
Cross Flatts Park	Lovell Park	Tyersal Park
Dartmouth Park	Manston Park	Western Flatts Cliff Park
Drighlington Park	Meanwood Park	Westroyd Park
East End Park	Micklefield Park, Rawdon	Wharfemeadows Park, Otley
Farnley Hall Park	New Farnley Park	Whinmoor Park, Coal Road
Glebelands Rec, Ninelands Lane	New Wortley Recreation Ground	Woodhouse Moor Park (Hyde Park)
Gotts Park	Nowell Mount	Woodhouse Ridge
Grove Hill Park, Otley	Nunroyd Park, Guiseley	Woodlesford Park
*NOTE: Pudsey Park holds a Green Flag Award, a national marker of quality, in addition to its Leeds Quality Park Award		

Table A2.2 – Case Study Selection Matrix																									
(Source: Leeds City Council, 2006; 2011a;2011b;2011c; 2011d; 2011e;Leeds Live it Love it,2011)																									
Park Name	Web presence/ Promotion			Access					Facilities												Area Features		Visit Trends		
	Leeds City Council		Leeds, Live It, Love It	Postcode	Approximate location relative to city centre (miles)	Approximate size (ha)	Transport Directions?	Car Park Present?	Open Grassland	Woodland Area	Formal Gardens	Water Features	Historical Features	Bandstand	Eating Area (Picnic or Café)	Bowling Green	Sports	Children's Play	Teen Area	Animal-based attraction	Educational attraction	Community events	Community Engagement	Estimated annual visits 2006*	Estimated annual visits 2009**
	LCC Parks	Forests of Leeds	Places to go																						
Banstead Park				LS8 5HS																					
Barleyhill Park				LS25 1AU	9E																				
Calverley Park				LS28 5RH	7.5W	3.8																	2,098,102 (78)	1,267,553 (50)	
Chapel Allerton Park				LS7 4QN																			659,472 (40)	440,089 (30)	
Cross Flatts Park				LS11 7BG																			1,003,965 (82)	1,080,684 (70)	
Drighlington Park				BD11 1JU	5SW																				
Farnley Hall Park				LS12 5HA	4W	16																	907,277 (55)	1,426,855 (66)	
Manston Park				LS15 8HB	4E	4																	1,785,135 (103)	1,114,441 (75)	
Meanwood Park				LS16 8EZ	4N	29									P								572,654 (35)	1,617,690 (102)	
Micklefield Park				LS19 6AZ	7NW	4																			787,808 (54)

Table A2.2 – Case Study Selection Matrix (continued)

Park Name	Web presence/ Promotion		Access				Facilities														Area Features		Visit Trends	
	Leeds City Council	Leeds, Live It, Love It	Postcode	Approximate location relative to city centre (miles)	Approximate size (ha)	Transport Directions?	Car Park Present?	Open Grassland	Woodland Area	Formal Gardens	Water Features	Historical Features	Bandstand	Eating Area (Picnic or Cafe)	Bowling Green	Sports	Children's Play Area	Teen Area	Animal-based attraction	Educational attraction	Community Events	Community Engagement	Estimated annual visits 2006*	Estimated annual visits 2009**
		Places to go																						
Pudsey Park			LS28 7RF	5W	3.3									C									2,123,879 (132)	2,426,679 (174)
Scatcherd Park			LS27 9JP																				738,624 (45)	633,438 (48)
Springhead Park			LS26 0DY	7SE	22									C									987,100 (67)	1,732,403 (159)
Tarnfield Park			LS19 7BB	16NW	17																			1,489,725 (76)
The Hollies			LS16 5NZ		22																			
Western Flatts Cliff Park			LS12 4HG	3W	14																		1,271,702 (48)	616,898 (39)
Westroyd Park			LS28 5AS																					
Wharfemeadows Park, Otley			LS21 2BH	14NW	5									C									1,668,132 (94)	1,785,794 (74)
*number of annual visits estimated by Leeds City Council on the basis of 3773 questionnaire returns ** number of annual visits estimated by Leeds City Council on the basis of 3738 questionnaire returns Values given in brackets indicate number of responses visit calculations are based on.																								

Appendix 3: Data Collection Documents

This appendix provides copies of all documents utilised in data collection. Figure A3.1 provides a sample data collection sheet from behaviour mapping conducted in Stage I of data collection, together with an example of this map once it had been written up.

Figures A3.2 and A3.3 provide pilot and final versions of resident surveys conducted in Stage II of data collection. A sample user survey response sheet is also provided on Figure A3.4. All of these survey instruments were tailored to specific case study spaces during distribution.


Questions included on these instruments were however identical across case studies and thus, where questions specified either Manston Park or Pudsey Park this is replaced with [NAME] in this Appendix. It is also worth noting that all survey instruments have been scaled down for inclusion in this Appendix.

Pilot and Final Interview Schedules utilised in Stage III of data collection are provided in Figures A3.5 and Figure A3.6. Highlighted sections on these documents denote occasions where information from questionnaire returns was drawn on.



Figure A3.1 – Sample Behaviour Map Data Collection Sheet and Written Up example

Figure A3.2 – Pilot Resident Questionnaire

<p>[NAME] Park Resident Questionnaire</p> <p>This study aims to investigate the use of [NAME] Park in Leeds, West Yorkshire and people's thoughts and feelings about parks more generally. [NAME] Park is located [insert location]. Participation in this study is voluntary and you can also leave out any questions that you do not wish to answer. Section 6 provides a space for additional comments should you wish to add to any answer given. All answers given will be kept confidential.</p> <p>SECTION 1: VISITING [NAME] PARK IN THE SUMMER <i>(Please circle the appropriate response)</i></p> <p>1.1a. How often do you visit [NAME] Park during the summer months (including late spring and early autumn when the weather is good)?</p> <p>Everyday Most Days Once or twice a week Once every two weeks Once a month Once or Twice during this season Never</p> <p>1.1b. If 'Never', why not?</p> <p>_____ _____ _____</p> <p style="text-align: center;">IF YOU ANSWERED 'Never' to 1.1a PLEASE GO TO SECTION 2</p> <p>1.2 What is the main reason why you visit [NAME] Park in the summer? <i>(Please circle only ONE response)</i></p> <table border="0"> <tr> <td>For a walk</td> <td>Watch sport or games</td> <td>Get some fresh air</td> </tr> <tr> <td>Walk the dog</td> <td>To relax or think</td> <td>To keep fit</td> </tr> <tr> <td>To entertain children</td> <td>For peace and quiet</td> <td>Take a shortcut</td> </tr> <tr> <td>Ride a bike</td> <td>Enjoy flowers/trees</td> <td>Meet friends</td> </tr> <tr> <td>Play sports and games</td> <td>To see birds & wildlife</td> <td>To volunteer</td> </tr> <tr> <td>Attend event</td> <td>Educational Visit</td> <td></td> </tr> <tr> <td colspan="3">Other <i>(please state)</i> : _____</td> </tr> </table> <p>1.3 When you visit [NAME] Park in the summer, where do you normally travel from?</p> <p>Home Work Other <i>(please state)</i> _____</p> <p>Serial No: MRS000/PRS000</p> <div style="text-align: right;">  </div> <div style="text-align: right;"> <div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center;">1 of 8</div> </div>		For a walk	Watch sport or games	Get some fresh air	Walk the dog	To relax or think	To keep fit	To entertain children	For peace and quiet	Take a shortcut	Ride a bike	Enjoy flowers/trees	Meet friends	Play sports and games	To see birds & wildlife	To volunteer	Attend event	Educational Visit		Other <i>(please state)</i> : _____		
For a walk	Watch sport or games	Get some fresh air																				
Walk the dog	To relax or think	To keep fit																				
To entertain children	For peace and quiet	Take a shortcut																				
Ride a bike	Enjoy flowers/trees	Meet friends																				
Play sports and games	To see birds & wildlife	To volunteer																				
Attend event	Educational Visit																					
Other <i>(please state)</i> : _____																						

1.4 How would you normally travel to the park in the summer?

On foot

By Car

By Bus

By Bicycle

Other (please state) _____

SECTION 2: VISITING [NAME] PARK IN THE WINTER**2.1a. How often do you visit [NAME] Park during the winter months (including late autumn and early spring when the weather is generally cold and/or wet)?**

Everyday

Most Days

Once or twice a week

Once every two weeks

Once a month

Once or Twice during this season

Never

2.1b. If 'Never', why not?

IF YOU ANSWERED 'Never' to 2.1a GO TO SECTION 3**2.2 What is the main reason that you visit [NAME] Park in the winter? (Please circle only *ONE* response)**

For a walk

Watch sport or games

Get some fresh air

Walk the dog

To relax or think

To keep fit

To entertain children

For peace and quiet

Take a shortcut

Ride a bike

Enjoy flowers/trees

Meet friends

Play sports and games

To see birds & wildlife

To Volunteer

Attend event

Educational Visit

Other (please state) _____

Serial No: MRS000/PRS000

2 of 8

2.3 When you visit [NAME] Park in the winter, where do you normally travel from?

Home

Work

Other (please state) _____

2.4 How would you normally travel to the park in the winter?

On foot

By Car

By Bus

By Bicycle

Other (please state) _____

SECTION 3: ATTITUDES TOWARDS [NAME] PARK**3.1 What 3 things do you like most about [NAME] Park?**

1. _____
2. _____
3. _____

3.2 What 3 things do you like least about [NAME] Park?

1. _____
2. _____
3. _____

3.3a. Do you use another park more often than [NAME] Park?

Yes

No

3.3b. If so, which park? (if you cannot give the park name, please give the street or road name where it is located)

Serial No: MRS000/PRS000

3 of 8

SECTION 4: ATTITUDES TOWARDS PUBLIC PARKS IN GENERAL

In this section you are asked to indicate your level of agreement or disagreement with each statement by indicating whether you: Strongly Agree (SA), Agree (A), are Neutral (N), Disagree (D), or Strongly Disagree (SD) (Please circle the appropriate response)

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
4.1	I am happy to spend time in the park during the day	SA	A	N	D	SD
4.2	I am happy to spend time in the park in the evening	SA	A	N	D	SD
4.3	The public park is an integral part of where I live	SA	A	N	D	SD
4.4	The public park is a key resource for my community	SA	A	N	D	SD
4.5	Public parks should be modernised to attract more users	SA	A	N	D	SD
4.6	Public parks should be conserved as they are indefinitely	SA	A	N	D	SD
4.7	Larger public parks (such as Roundhay Park) are more beneficial than smaller community parks	SA	A	N	D	SD
4.8	Public parks provide a lot of indirect benefits for my community, such as environmental services	SA	A	N	D	SD
4.9	I like to know that the park is there in case I want to use it in the future	SA	A	N	D	SD
4.10	Public parks have an intrinsic value as part of nature	SA	A	N	D	SD
4.11	I like to remember the times I have used the park in the past	SA	A	N	D	SD
4.12	I like to know the park will be there for future generations	SA	A	N	D	SD
4.13	I like to know the park is there for others to use	SA	A	N	D	SD
4.14	Public parks remind me of previous eras	SA	A	N	D	SD

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4.15a. Do you think local parks such as [NAME] Park are important?

Yes

No

4.15b. If so, why? If not, why not?

SECTION 5: GENERAL INFORMATION

In examining the use of [NAME] Park, it is useful to gain an understanding about other leisure activities that you may participate in *(Please tick the appropriate response)*:

5.1 How often do you do each of the following activities in your free time?

		Everyday	Most Days	Once or twice a week	Once every two weeks	Once a month	Less than once a month	Never
a.	Watch TV, films or DVDs							
b.	Go out shopping for pleasure							
c.	Read books or magazines							
d.	Attend cultural events such as concerts, live theatre or exhibitions							
e.	Socialise at a pub or restaurant							
f.	Socialise at own or friend's house							
g.	Listen to music							
h.	Participate in physical activities such as sports or exercise							
i.	Watch or attend sporting events as a spectator							
j.	Surf the Internet							
k.	Play computer games							
l.	Go to the cinema							
m.	Other: <i>(please state)</i>							

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It is also useful for us to know a bit more about you as an individual *(Please circle the appropriate response)*:

5.2 Please indicate your gender:

Female

Male

5.3 Please indicate your age:

18-24

25-34

35-44

45-54

55-64

65+

5.4 What is your employment status?

Employed full time

Employed part time

Self-employed

Unemployed

Retired

Student

Homemaker

Sick/Disabled

Other *(please state)* _____

5.5 Do you have or look after any children under the age of 13?

Yes

No

5.6 Do you have access to a private garden?

Yes

No

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5.7 How long have you lived in your current house?

- Less than 1 year
- Between 1 and 2 years
- Between 2 and 5 years
- Over 5 years

5.8 What is your household income before tax?

- Less than £20,000
- Between £20,000 and £30,000
- Between £30,000 and £40,000
- Between £40,000 and £50,000
- Between £50,000 and £60,000
- Between £60,000 and £70,000
- More than £70,000

5.9 Which of the following best describes your ethnic group? (please circle only ONE response)**White**

- White British
- White Irish
- Gypsy/Traveller
- Other White Background (please state):
- _____

Asian or Asian British

- Indian
- Pakistani
- Bangladeshi
- Other Asian Background (please state):
- _____

Other ethnic groups

- Chinese
- Arab
- Other ethnic group (please write in):
- _____

Mixed

- White and Black Caribbean
- White and Black African
- White and Asian
- Other Mixed Background (please state):
- _____

Black or Black British

- Caribbean
- African
- Other Black background (please write in):
- _____

SECTION 6: INTERVIEW AND ADDITIONAL COMMENTS

6.1 Would you be willing to participate in a follow-up interview to this survey?

Whether you frequently visit the park or never do so, we are interested in hearing your opinions about this space and about parks in general. All of those who volunteer for interview will be entered into a further prize draw to win **a £10 high street voucher**.

If you would be willing to be contacted for interview, please provide your contact information below:

Name

Contact Telephone Number

Contact Email Address

6.2 Please use the space below to add any further comments you have, relating to the questions above

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

Thank you for participating in the study

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Figure A3.3 – Final Resident Questionnaire

<p>[NAME] Park Resident Questionnaire</p> <p>This study aims to investigate the use of [NAME]Manston Park in Leeds, West Yorkshire and people's thoughts and feelings about parks more generally. [NAME] Park is located [insert location]. Participation in this study is voluntary and you can also leave out any questions that you do not wish to answer. Section 6 provides a space for additional comments should you wish to add to any answer given. All answers given will be kept confidential.</p> <p>SECTION 1: VISITING [NAME] PARK IN THE SUMMER <i>(Please circle the appropriate response)</i></p> <p>1.1a. How often do you visit [NAME] Park during the summer months (including late spring and early autumn when the weather is good)?</p> <p>Everyday Most Days Once or twice a week Once every two weeks Once a month Once or Twice during this season Never</p> <p>1.1b. If 'Never', why not?</p> <p>_____ _____ _____</p> <p style="text-align: center;">IF YOU ANSWERED 'Never' to 1.1a PLEASE GO TO SECTION 2</p> <p>1.2 What is the main reason why you visit [NAME] Park in the summer? <i>(Please circle all that apply)</i></p> <table border="0"> <tr> <td>For a walk</td> <td>To watch sport or games</td> <td>To get some fresh air</td> </tr> <tr> <td>To walk the dog</td> <td>To relax or think</td> <td>To keep fit</td> </tr> <tr> <td>To entertain children</td> <td>For peace and quiet</td> <td>To take a shortcut</td> </tr> <tr> <td>To play sports and games</td> <td>To enjoy the flowers/trees</td> <td>To meet friends</td> </tr> <tr> <td>To attend an event</td> <td>To see birds & wildlife</td> <td>To play bowls</td> </tr> <tr> <td colspan="3">Other <i>(please state)</i> _____</td> </tr> </table> <p>1.3 When you visit [NAME] Park in the summer, where do you normally travel from?</p> <p>Home Work Other <i>(please state)</i> _____</p> <p>Serial No: MRS000/PRS000</p> <p style="text-align: right;">1 of 8</p>		For a walk	To watch sport or games	To get some fresh air	To walk the dog	To relax or think	To keep fit	To entertain children	For peace and quiet	To take a shortcut	To play sports and games	To enjoy the flowers/trees	To meet friends	To attend an event	To see birds & wildlife	To play bowls	Other <i>(please state)</i> _____		
For a walk	To watch sport or games	To get some fresh air																	
To walk the dog	To relax or think	To keep fit																	
To entertain children	For peace and quiet	To take a shortcut																	
To play sports and games	To enjoy the flowers/trees	To meet friends																	
To attend an event	To see birds & wildlife	To play bowls																	
Other <i>(please state)</i> _____																			



1.4 How would you normally travel to the park in the summer?

On foot

By Car

By Bus

By Bicycle

Other (please state) _____

SECTION 2: VISITING [NAME] PARK IN THE WINTER (Please circle the appropriate response)**2.1a. How often do you visit [NAME] Park during the winter months (including late autumn and early spring when the weather is generally cold and/or wet)?**

Everyday

Most Days

Once or twice a week

Once every two weeks

Once a month

Once or Twice during this season

Never

2.1b. If 'Never', why not?

IF YOU ANSWERED 'Never' to 2.1a GO TO SECTION 3**2.2 What is the main reason that you visit [NAME] Park in the winter?** (Please circle all that apply)

For a walk

To watch sport or games

To get some fresh air

To walk the dog

To relax or think

To keep fit

To entertain children

For peace and quiet

To take a shortcut

To play sports and games

To enjoy the flowers/trees

To meet friends

To attend an event

To see birds & wildlife

To play bowls

Other (please state) _____

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2.3 When you visit [NAME] Park in the winter, where do you normally travel from?

Home

Work

Other (please state) _____

2.4 How would you normally travel to the park in the winter?

On foot

By Car

By Bus

By Bicycle

Other (please state) _____

SECTION 3: ATTITUDES TOWARDS [NAME] PARK**3.1 What do you like most about [NAME] Park? (please write up to 3 things, in order of importance)**

1. _____

2. _____

3. _____

3.2 What do you like least about [NAME] Park? (please write up to 3 things, in order of importance)

1. _____

2. _____

3. _____

3.3a. Do you use another park more often than [NAME] Park?

Yes

No

3.3b. If so, which park? (if you cannot give the park name, please give the street or road name where it is located)

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SECTION 4: ATTITUDES TOWARDS PUBLIC PARKS IN GENERAL

In this section you are asked to indicate your level of agreement or disagreement with each statement by indicating whether you: Strongly Agree (SA), Agree (A), are Neutral (N), Disagree (D), or Strongly Disagree (SD) (Please circle the appropriate response)

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
4.1	I am happy to spend time in the park during the day	SA	A	N	D	SD
4.2	I am happy to spend time in the park in the evening	SA	A	N	D	SD
4.3	The public park is an integral part of where I live	SA	A	N	D	SD
4.4	The public park is a key resource for my community	SA	A	N	D	SD
4.5	Public parks should be modernised to attract more users	SA	A	N	D	SD
4.6	Public parks should be conserved as they are indefinitely	SA	A	N	D	SD
4.7	Larger public parks (such as Roundhay Park) are more beneficial than smaller community parks	SA	A	N	D	SD
4.8	Public parks provide a lot of indirect benefits for my community, such as environmental services	SA	A	N	D	SD
4.9	I like to know that the park is there in case I want to use it in the future	SA	A	N	D	SD
4.10	Public parks have an intrinsic value as part of nature	SA	A	N	D	SD
4.11	I like to remember the times I have used the park in the past	SA	A	N	D	SD
4.12	I like to know the park will be there for future generations	SA	A	N	D	SD
4.13	I like to know the park is there for others to use	SA	A	N	D	SD
4.14	Public parks remind me of previous eras	SA	A	N	D	SD

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4.15b. If YES, why? If NO, why not?

SECTION 5: GENERAL INFORMATION

In examining the use of [NAME] Park, it is useful to gain an understanding about other leisure activities that you may participate in (Please tick the appropriate response):

5.1 How often do you do each of the following activities in your free time?

		Everyday	Most Days	Once or twice a week	Once every two weeks	Once a month	Less than once a month	Never
a.	Watch TV, films or DVDs							
b.	Go out shopping for pleasure							
c.	Read books or magazines							
d.	Attend cultural events such as concerts, live theatre or exhibitions							
e.	Socialise at a pub, café or restaurant							
f.	Socialise at own or friend's house							
g.	Listen to music							
h.	Participate in physical activities, such as sports or exercise							
i.	Watch or attend sporting events as a spectator							
j.	Surf the Internet							
k.	Play computer games							
l.	Go to the cinema							
m.	Participate in outdoor pursuits, such as golf or hill-walking							
n.	Other: (please state)							

It is also useful for us to know a bit more about you as an individual *(Please circle the appropriate response)*:

5.2 Please indicate your gender:

Female

Male

5.3 Please indicate your age:

18-24

25-34

35-44

45-54

55-64

65-74

75-84

85+

5.4 What is your employment status?

Employed full time

Employed part time

Self-employed

Unemployed

Retired

Student

Homemaker

Sick/Disabled

Other *(please state)* _____

5.5 Do you have or look after any children under the age of 13?

Yes

No

5.6 Do you have access to a private garden?

Yes

No

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5.7 How long have you lived in your current house?

Less than 1 year

Between 1 and 2 years

Between 2 and 5 years

Between 5 and 10 years

Over 10 years

5.8 What is your household income before tax?

Less than £20,000

Between £20,000 and £30,000

Between £30,000 and £40,000

Between £40,000 and £50,000

Between £50,000 and £60,000

Between £60,000 and £70,000

More than £70,000

5.9 Which of the following best describes your ethnic group? (please circle only ONE response)**White**

White British

White Irish

Gypsy/Traveller

Other White Background (please state):
_____**Mixed**

White and Black Caribbean

White and Black African

White and Asian

Other Mixed Background (please state):
_____**Asian or Asian British**

Indian

Pakistani

Bangladeshi

Other Asian Background (please state):
_____**Black or Black British**

Caribbean

African

Other Black background (please write in):
_____**Other ethnic group (please write in):**

Chinese

Arab

Other ethnic group (please write in):

SECTION 6: INTERVIEW AND ADDITIONAL COMMENTS

6.1 Would you be willing to participate in a follow-up interview to this survey?

Whether you visit [NAME] Park frequently or never do so, we are interested in hearing your opinions about this space and about parks in general. All of those who volunteer for interview will be entered into a further prize draw to win a **£10 high street voucher**.

If you would be willing to be contacted for interview, please provide your contact information below:

Name

Contact Telephone Number

Contact Email Address

6.2 Please use the space below to add any further comments you have, relating to the questions above

[illegible]

Thank you for participating in the study

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Figure A3.4 – User Survey Record Sheet

[NAME] Park User Survey		Date:		Time:		
SECTION 1 – [NAME] MANSTON PARK		MUS001	MUS002	MUS003	MUS004	MUS005
1.1	How often do you use [NAME] Park in the Summer Months (when the weather is generally good)?					
	Everyday					
	Most Days					
	Once or twice a week					
	Once every two weeks					
	Once a month					
	Once or Twice during this season					
	Never					
1.2	What are your reasons for visiting [NAME] Park today?					
	For a walk					
	To walk the dog					
	To entertain children					
	To play sports and games					
	To attend an event					
	To watch sport and games					
	To relax or think					
	For peace and quiet					
	To enjoy flowers/trees					
	To see birds & wildlife					
	To get some fresh air					
	To keep fit					
	To take a shortcut					
	To meet friends					
	To play bowls					
	Other:					
1.3a	Are these the main reasons you would ordinarily visit [NAME] Park in the Summer?	Y/N	Y/N	Y/N	Y/N	Y/N
1.3b	If No, what are?					
1.4	How often do you visit [NAME] Park during the Winter months (when the weather is generally cold or wet)?					
	Everyday					
	Most Days					
	Once or twice a week					
	Once every two weeks					
	Once a month					
	Once or Twice during this season					
	Never					
1.5	What are the main reasons you visit [NAME] Park in the Winter?					
	For a walk					
	To walk the dog					
	To entertain children					
	To play sports and games					
	To attend an event					
	To watch sport and games					
	To relax or think					
	For peace and quiet					
	To enjoy flowers/trees					
	To see birds & wildlife					
	To get some fresh air					
	To keep fit					
	To take a shortcut					
	To meet friends					
	To play bowls					
	Other:					

		MUS001	MUS002	MUS003	MUS004	MUS005
1.6	Where have you travelled from today to visit the park?					
	Home					
	Work					
	Shops					
	Other:					
1.7	How have you travelled to the park today?					
	On Foot					
	By Car					
	By Bus					
	Other					
1.8	Observe – Respondent alone or in group?:	A/G	A/G	A/G	A/G	A/G
1.9a	Do you use another park more often than [NAME] Park?	Y/N	Y/N	Y/N	Y/N	Y/N
1.9b	If Yes, which one?					
	Section 2 – About You					
2.1	What is your postcode?					
2.2	Observe – Gender	F/M	F/M	F/M	F/M	F/M
2.3	Please indicate your age					
	18-24					
	25-34					
	35-44					
	45-54					
	55-64					
	65-74					
	75-84					
	85+					
2.4	What is your employment status?					
	Employed full time					
	Employed part time					
	Self-employed					
	Unemployed					
	Retired					
	Student					
	Homemaker					
	Sick/Disabled					
	Other:					
2.5	Do you have or look after any children under the age of 13?	Y/N	Y/N	Y/N	Y/N	Y/N
2.6	Do you have access to a private garden?	Y/N	Y/N	Y/N	Y/N	Y/N

Figure A3.5 – Pilot Interview Schedule**Interview Guide for Resident Interviews– Pilot Version**

Interviews should last for 30-60 minutes. Although the focus of the interviews is change over time (in park use, character etc.), where residents indicate that interviews are likely to be shorter, focus should be on obtaining residents perspectives on the role of case study spaces in their lives.

- Thank you for returning questionnaire
- Introduce self
- Explain aims of research, confidentiality and data storage (go through Participant Information Sheet)
- Discuss anonymity, audio recording and obtain consent (go through Consent Form)
- Obtain indication from participant as to the maximum length of time they can spend on interview

Introduction

1. [I notice from the questionnaire you returned that you have lived in your current house for ... years] have you always lived in the area?
2. What brought you to the area?
 - What role did the park play in your decision to move here?

Section 1 – The Character of [Manston/Pudsey] Park

3. How has the park changed during the time you have lived here?
 - How have the facilities of the park changed, if at all?
 - How busy was the park when you first moved here?
 - How have the people that frequent the park changed, if at all?
 - What types of events have occurred at the park whilst you've lived here?

Section 2 – Resident's Leisure Behaviour & Use of [Manston/Pudsey] Park

4. How has your use of the park changed over time, if at all?
 - Lifecourse stage
 - Work/life balance
 - Economic stresses?
5. What [other] things do you like to do in your leisure time?
6. How much of your leisure time would you spend in the local area? Can you tell me about that
 - Seek location of dominant leisure behaviour, activity level etc.

Section 3 – Negative Value

7. The survey you completed had a section on the aspects that you liked least. You mentioned ... Can you tell me more about these things? How much of a problem do you think these things are? [Seek examples/personal experience/second-hand anecdotes]
8. How, if at all, have you altered your use of the park because of these aspects?
 - Time of day?
 - Preparations for going?
 - Certain activities?
9. Other people in the survey mentioned [address issues not addressed out of: graffiti; antisocial behaviour; dog fouling; litter]. How prevalent do you think these problems are? [Seek examples/personal experience/second-hand anecdotes]

Section 4 – The Importance of Community Parks

10. You mentioned that you thought local parks were important. Could you tell me a little bit more about why you think that?
11. How do you think the importance of local parks like [Manston/Pudsey] might have changed over time, if at all?
 - Leisure behaviour
 - Gardens
 - Concern re kids playing outside
 - Money
12. It's been suggested by a number of people in my study that local parks are important hubs or focus points for the community. Do you think this is true of local parks in general?
 - Inclusion/specialist groups
13. How true do you think it is of [Manston/Pudsey] Park? Why? Why not?

Section 5 – The Future of Community Parks

As I'm sure you're aware there have been a lot of cuts to public funding in recent years and questions have been raised as to how the council are going to be able to fund the maintenance of parks.

14. It has been suggested that parks should diversify to fund maintenance, putting in facilities such as cafes. How much of an option do you think that is for [Manston/Pudsey] park?
 - Size
 - Number of people
 - Would local people welcome such things? – modernisation vs. conservation
15. Or that they could start charging for some services/facilities and events.
 - How much of an option do you think that is for [Manston/Pudsey] park?
16. There have also been suggestions that local communities may volunteer to help maintain their local parks. How realistic do you think this would be for parks like [Manston/Pudsey]?
 - Age of users
 - Users vs. residents
 - Reliability
 - Seasonality
17. Would you ever volunteer to maintain your local park? If so, why? If not, why not?
 - Mobility
 - Age
 - Commitment
18. You mentioned/ Number of people who responded to the survey mentioned that they used Roundhay Park or Temple Newsam park more often – how does their role differ, if at all?

Figure A3.6 – Final Interview Schedule**Interview Guide for Resident Interviews– Final Version**

Interviews should last for 30-60 minutes. Although the focus of the interviews is change over time (in park use, character etc.), where residents indicate that interviews are likely to be shorter, focus should be on obtaining residents perspectives on the role of case study spaces in their lives.

- Thank you for returning questionnaire
- Introduce self
- Explain aims of research, confidentiality and data storage (go through Participant Information Sheet)
- Discuss anonymity, audio recording and obtain consent (go through Consent Form)
- Obtain indication from participant as to the maximum length of time they can spend on interview

Introduction

1. Obviously, I'm not from [Pudsey/Crossgates], can you tell me a bit about the area?
 - General sentiments
 - Aspects of change
 - Feelings about community
2. [I notice from the questionnaire you returned that you have lived in your current house for ___ years] have you always lived in the area?
3. What brought you to the area?
 - What role did the park play in your decision to move here?

Section 1 – The Character of [Manston/Pudsey] Park

4. How has the park changed during the time you have lived here?
 - How have the facilities of the park changed, if at all?
 - How busy was the park when you first moved here?
 - How have the people that use the park changed, if at all?
 - What types of events have occurred at the park whilst you've lived here?

Section 2 – Resident's Leisure Behaviour & Use of [Manston/Pudsey] Park

5. How has your use of the park changed over time, if at all?
 - Lifecourse stage
 - Work/life balance
 - Economic stresses?
6. What [other] things do you like to do in your leisure time?
7. How much of your leisure time would you spend in the local area? Can you tell me about that
 - Seek location of dominant leisure behaviour, activity level etc.

Section 3 – Negative Value

8. The survey you completed had a section on the aspects that you liked least. You mentioned _____. Can you tell me more about these things? How much of a problem do you think these things are? [Seek examples/personal experience/second-hand anecdotes]

9. How, if at all, have you altered your use of the park because of these aspects?
 - Time of day?
 - Preparations for going?
 - Certain activities?
10. Other people in the survey mentioned [address issues not addressed out of: graffiti; antisocial behaviour; dog fouling; litter]. How prevalent do you think these problems are? [Seek examples/personal experience/second-hand anecdotes]

Section 4 – The Importance of Community Parks

11. You mentioned that you thought local parks were important. Could you tell me a little bit more about why you think that?
 - Probe on aspects previously mentioned
12. How do you think the importance of local parks like [Manston/Pudsey] might have changed over time, if at all?
 - Leisure behaviour
 - Gardens
 - Concern re kids playing outside
 - Money
13. It's been suggested by a number of people in my study that local parks are important hubs or focus points for the community. Do you think this is true of local parks in general?
 - Inclusion/specialist groups
14. How true do you think it is of [Manston/Pudsey] Park? Why? Why not?

Section 5 – The Future of Community Parks

As I'm sure you're aware there have been a lot of cuts to public funding in recent years and questions have been raised as to how the council are going to be able to fund the maintenance of parks.

15. It has been suggested that parks should diversify to fund maintenance, putting in facilities such as cafes. How much of an option do you think that is for [Manston/Pudsey] park?
 - Size
 - Number of people
 - Would local people welcome such things? – modernisation vs. conservation
16. Or that they could start charging for some services/facilities and events.
 - How much of an option do you think that is for [Manston/Pudsey] park?
17. There have also been suggestions that local communities may volunteer to maintain their local parks. How realistic do you think this would be for parks like [Manston/Pudsey]?
 - Age of users
 - Users vs. residents
 - Reliability
 - Seasonality
18. Would you ever volunteer to maintain your local park? If so, why? If not, why not?
 - Mobility
 - Age
 - Commitment

19. **You mentioned**/ Number of people who responded to the survey mentioned that they used Roundhay Park or Temple Newsam park more often – how does their role differ, if at all?

Appendix 4: Dataset Summary Tables

This appendix provides a summary of responses to all aspects of questionnaire surveys across datasets. Firstly, Table A4.1 provides a summary of resident survey responses, providing information on all questionnaire sections, including those which do not feature in analytical discussions. A summary of the distribution of responses amongst user survey responses is then given in Table A4.2.

Table A4.1 – Resident survey dataset summary table							
		Manston	Pudsey			Manston	Pudsey
	N	140	153		N	140	153
Question	Options	%	%	Question	Options	%	%
1.1a Approximately how often do you visit in the summer months?	Everyday	5.0	3.9	1.2 What is the main reason you visit in the summer? (continued)	To attend an event	2.1	16.3
	Most Days	10.0	13.1		To watch sport or games	10.0	3.3
	Once or twice a week	25.7	34.6		To relax or think	9.3	11.1
	Once every two weeks	7.9	13.1		For peace and quiet	7.9	16.3
	Once a month	10.7	10.5		To enjoy flowers or trees	21.4	34.0
	Once or twice during season	22.1	17.6		To see birds or wildlife	8.6	17.0
	Never	18.6	7.2		To get some fresh air	31.4	39.2
1.2 What is the main reason you visit in the summer? [select all that apply]	Unanswered	18.6	7.2		To keep fit	14.3	14.4
	For a walk	34.3	46.4		To take a shortcut	18.6	31.4
	To walk the dog	17.9	11.8		To meet friends	7.9	5.2
	To entertain children	34.3	39.9		To play bowls	1.4	2.0
	To play sport or games	5.0	3.9		Other	2.9	2.6

		Manston	Pudsey			Manston	Pudsey
	N	140	153		N	140	153
Question	Options	%	%	Question	Options	%	%
1.3 Where do you normally travel to the park from in the summer?	Unanswered	18.6	7.2	2.1a Approximately how often do you visit in the winter months?	Unanswered	-	0.7
	Home	81.4	90.8		Everyday	2.1	1.3
	Work	-	0.7		Most Days	7.1	9.2
	Other	-	1.3		Once or twice a week	17.9	27.5
1.4 How would you normally travel to the park in the summer?	Unanswered	18.6	7.2		Once every two weeks	7.9	14.4
	On foot	75.0	82.4		Once a month	12.1	11.1
	By car	5.0	9.2		Once or twice during season	23.6	20.9
	By bus	-	0.7		Never	29.3	15.0
	By bicycle	1.4	0.7				
	Other	-	-				

		Manston	Pudsey			Manston	Pudsey
	N	140	153		N	140	153
Question	Options	%	%	Question	Options	%	%
2.2 What is the main reason you visit in the winter? [select all that apply]	Unanswered	29.3	15.7	2.2 What is the main reason you visit in the winter? (continued)	To keep fit	14.3	14.4
	For a walk	32.9	44.4		To take a shortcut	18.6	31.4
	To walk the dog	18.6	13.1		To meet friends	7.9	5.2
	To entertain children	20.7	30.1		To play bowls	1.4	2.0
	To play sport or games	2.9	0.7		Other	2.9	2.6
	To attend an event	0.7	3.3	2.3 Where do you normally travel to the park from in the winter?	Unanswered	30.0	15.0
	To watch sport or games	5.0	-		Home	70.0	82.4
	To relax or think	5.7	5.9		Work	-	1.3
	For peace and quiet	8.6	15.0		Other	-	1.3
	To enjoy flowers or trees	9.3	13.1				
	To see birds or wildlife	8.6	17.0				
	To get some fresh air	31.4	39.2				

		Manston	Pudsey			Manston	Pudsey
	N	140	153		N	140	153
Question	Options	%	%	Question	Options	%	%
2.4 How would you normally travel to the park in the winter?	Unanswered	18.6	7.2	4.1 I am happy to spend time in the park during the day	Unanswered	1.4	1.3
	On foot	75.0	82.4		Strongly Agree	40.7	44.4
	By car	5.0	9.2		Agree	40.7	44.4
	By bus	-	0.7		Neutral	14.3	6.5
	By bicycle	1.4	0.7		Disagree	1.4	2.6
	Other	-	-		Strongly Disagree	1.4	0.7
3.3a Do you visit another park more often	Unanswered	2.1	-				
	Yes	45.7	11.1				
	No	52.2	88.9				

		Manston	Pudsey			Manston	Pudsey
	N	140	153		N	140	153
Question	Options	%	%	Question	Options	%	%
4.2 I am happy to spend time in the park in the evening	Unanswered	3.6	2.6	4.4 The public park is a key resource for my community	Unanswered	2.1	0.7
	Strongly Agree	7.1	5.9		Strongly Agree	35.7	40.5
	Agree	21.4	18.3		Agree	37.1	43.1
	Neutral	28.6	33.3		Neutral	20.7	11.7
	Disagree	25.7	28.1		Disagree	2.1	3.3
	Strongly Disagree	13.6	11.8		Strongly Disagree	2.1	0.7
4.3 The public park is an integral part of my neighbourhood	Unanswered	1.4	1.3	4.5 Public parks should be modernised to attract more users	Unanswered	2.9	2.0
	Strongly Agree	35.0	43.8		Strongly Agree	27.1	19.0
	Agree	39.3	40.5		Agree	36.4	32.7
	Neutral	18.5	9.8		Neutral	25.7	26.1
	Disagree	5.0	2.6		Disagree	7.1	18.3
	Strongly Disagree	0.7	2.0		Strongly Disagree	0.7	2.0

		Manston	Pudsey			Manston	Pudsey
	N	140	153		N	140	153
Question	Options	%	%	Question	Options	%	%
4.6 Public parks should be conserved as they are indefinitely	Unanswered	3.6	2.0	4.8 Public parks provide a lot of indirect benefits for my community, such as environmental services	Unanswered	2.9	2.0
	Strongly Agree	35.0	33.3		Strongly Agree	19.3	20.9
	Agree	30.7	28.1		Agree	39.3	43.1
	Neutral	20.7	26.2		Neutral	30.3	28.8
	Disagree	8.6	9.8		Disagree	7.9	4.6
	Strongly Disagree	1.4	0.7		Strongly Disagree	-	0.7
4.7 Larger parks (such as Roundhay park or Temple Newsam) are more beneficial than smaller community parks	Unanswered	2.9	1.3	4.9 I like to know that the park is there in case I want to use it in the future	Unanswered	2.1	2.0
	Strongly Agree	12.9	8.5		Strongly Agree	42.1	49.0
	Agree	20.0	10.5		Agree	45.7	41.8
	Neutral	22.9	15.7		Neutral	9.3	6.5
	Disagree	29.3	45.1		Disagree	-	0.7
	Strongly Disagree	12.1	19.0		Strongly Disagree	0.7	-

		Manston	Pudsey			Manston	Pudsey
	N	140	153		N	140	153
Question	Options	%	%	Question	Options	%	%
4.10 Public parks have an intrinsic value as a part of nature	Unanswered	1.4	0.7	4.12 I like to know the park will be there for future generations	Unanswered	0.7	0.7
	Strongly Agree	44.3	47.1		Strongly Agree	57.1	63.4
	Agree	44.3	40.5		Agree	38.6	32.0
	Neutral	8.5	10.5		Neutral	3.6	3.9
	Disagree	1.4	0.7		Disagree	-	-
	Strongly Disagree	-	0.7		Strongly Disagree	-	-
4.11 I like to remember times I have used parks in the past	Unanswered	1.4	0.7	4.13 I like to know the park is there for others to use	Unanswered	0.7	0.7
	Strongly Agree	30.7	34.0		Strongly Agree	50.7	58.8
	Agree	41.4	39.9		Agree	45.7	37.3
	Neutral	22.8	22.2		Neutral	2.9	3.3
	Disagree	2.9	3.3		Disagree	-	-
	Strongly Disagree	0.7	-		Strongly Disagree	-	-

		Manston	Pudsey			Manston	Pudsey
	N	140	153		N	140	153
Question	Options	%	%	Question	Options	%	%
4.14 Public parks remind me of previous eras	Unanswered	0.7	1.3	5.1a How often do you watch TV, films or DVDs?	Unanswered	5.0	1.3
	Strongly Agree	29.3	35.9		Everyday	50.0	47.7
	Agree	39.3	30.1		Most Days	30.8	37.3
	Neutral	22.9	23.6		Once or twice a week	12.1	9.8
	Disagree	7.9	9.2		Once every two weeks	1.4	0.7
	Strongly Disagree	-	-		Once a month	0.7	2.0
4.15a Do you think local parks are important?	Unanswered	1.4	2.6		Less than once a month	-	1.3
	Yes	98.6	96.7		Never	-	-
	No	-	0.7				

		Manston	Pudsey			Manston	Pudsey
	N	140	153		N	140	153
Question	Options	%	%	Question	Options	%	%
5.1b How often do you go out shopping for pleasure?	Unanswered	5.0	5.2	5.1d How often do you attend cultural events such as concerts, live theatre or exhibitions?	Unanswered	4.3	4.6
	Everyday	5.0	5.9		Everyday	0.7	1.3
	Most Days	10.7	5.9		Most Days	0.7	0.7
	Once or twice a week	30.7	24.2		Once or twice a week	-	1.3
	Once every two weeks	15.0	15.0		Once every two weeks	7.9	5.9
	Once a month	16.4	16.3		Once a month	22.2	19.6
	Less than once a month	10.7	17.0		Less than once a month	52.1	50.3
	Never	6.4	10.5		Never	12.1	16.3
5.1c How often do you read books or magazines?	Unanswered	4.3	3.3	5.1e How often do you socialise at a pub, café or restaurant?	Unanswered	2.9	4.6
	Everyday	38.6	35.3		Everyday	1.4	2.0
	Most Days	24.3	26.8		Most Days	5.7	3.3
	Once or twice a week	15.7	20.3		Once or twice a week	25.7	35.3
	Once every two weeks	7.1	5.2		Once every two weeks	22.1	13.7
	Once a month	3.6	6.5		Once a month	22.9	23.5
	Less than once a month	5.7	2.6		Less than once a month	15.7	9.8
	Never	0.7	-		Never	3.6	7.8

		Manston	Pudsey			Manston	Pudsey
	N	140	153		N	140	153
Question	Options	%	%	Question	Options	%	%
5.1f How often do you socialise at own or friend's house?	Unanswered	4.3	5.9	5.1h How often do you participate in physical activities such as sport or exercise?	Unanswered	6.4	5.9
	Everyday	2.1	-		Everyday	12.1	7.2
	Most Days	10.7	2.6		Most Days	16.4	15.7
	Once or twice a week	27.1	24.2		Once or twice a week	25.7	34.0
	Once every two weeks	21.4	23.5		Once every two weeks	5.7	7.2
	Once a month	12.9	18.3		Once a month	4.3	3.9
	Less than once a month	15.0	17.6		Less than once a month	15.7	9.2
	Never	6.4	7.8		Never	13.6	17.0
5.1g How often do you listen to music?	Unanswered	4.3	3.9	5.1i How often do you watch or attend sporting events as a spectator?	Unanswered	3.6	7.2
	Everyday	32.9	30.7		Everyday	-	-
	Most Days	30.7	35.9		Most Days	3.6	3.3
	Once or twice a week	17.1	14.4		Once or twice a week	11.4	15.7
	Once every two weeks	5.0	3.9		Once every two weeks	9.3	4.6
	Once a month	5.0	2.6		Once a month	9.3	8.5
	Less than once a month	4.3	4.6		Less than once a month	26.4	32.0
	Never	0.7	3.9		Never	36.4	28.8

		Manston	Pudsey			Manston	Pudsey
	N	140	153		N	140	153
Question	Options	%	%	Question	Options	%	%
5.1j How often do you surf the internet?	Unanswered	5.7	5.9	5.1l How often do you go to the cinema?	Unanswered	7.1	7.2
	Everyday	27.9	27.5		Everyday	0.7	-
	Most Days	25.7	26.1		Most Days	-	-
	Once or twice a week	14.3	14.4		Once or twice a week	0.7	-
	Once every two weeks	5.0	2.0		Once every two weeks	6.4	3.3
	Once a month	1.4	2.0		Once a month	10.0	19.0
	Less than once a month	3.6	3.9		Less than once a month	48.6	42.5
	Never	16.4	18.3		Never	26.4	28.1
5.1k How often do you play computer games?	Unanswered	5.0	7.2	5.1m How often do you participate in outdoor pursuits such as golf or hill-walking?	Unanswered	23.6	26.1
	Everyday	3.6	1.3		Everyday	2.1	1.3
	Most Days	5.7	2.0		Most Days	2.1	0.7
	Once or twice a week	3.6	6.5		Once or twice a week	10.0	15.7
	Once every two weeks	2.1	4.6		Once every two weeks	4.3	6.5
	Once a month	2.1	2.6		Once a month	13.6	7.8
	Less than once a month	11.4	7.8		Less than once a month	15.0	15.7
	Never	66.4	68.0		Never	29.3	26.1

		Manston	Pudsey			Manston	Pudsey
	N	140	153		N	140	153
Question	Options	%	%	Question	Options	%	%
5.2 Please indicate your gender	Unanswered	-	-	5.4 What is your employment status? (cont.)	Homemaker	1.4	3.3
	Female	53.6	51.0		Sick/Disabled	1.4	2.6
	Male	46.4	49.0		Other	0.7	-
5.3 Please indicate your age	Unanswered	-	0.7	5.5 Do you have or look after children under the age of 13?	Unanswered	1.4	0.7
	18-24	7.1	5.9		Yes	33.6	38.6
	25-34	9.3	9.8		No	65.0	60.8
	35-44	11.4	19.0	5.6 do you have access to a private garden?	Unanswered	0.7	0.7
	45-54	19.3	13.1		Yes	99.3	89.5
	55-64	20.0	18.3		No	-	9.8
	65+	32.9	33.3	5.7 How long have you lived in your current house?	Unanswered	-	1.3
5.4 What is your employment status?	Unanswered	0.7	-		Less than 1 year	2.1	2.6
	Employed full time	32.1	37.3		Between 1 and 2 years	2.1	4.6
	Employed part time	14.3	12.4		Between 2 and 5 years	7.9	11.8
	Self-employed	7.1	3.9		Over 5 years	87.9	79.7
	Unemployed	2.1	2.6				
	Retired	37.1	35.3				
	Student	2.9	2.6				

		Manston	Pudsey			Manston	Pudsey
	N	140	153		N	140	153
Question	Options	%	%	Question	Options	%	%
5.8 What is your household income before tax?	Unanswered	22.1	28.1	5.9 Which of the following best describes your ethnic group?	Unanswered	0.7	1.3
	Less than £20,000	27.9	23.5		White	97.1	98.0
	Between £20,000 and £30,000	18.6	13.7		Mixed	1.4	-
	Between £30,000 and £40,000	10.7	5.2		Asian or Asian British	-	0.7
	Between 40,000 and £50,000	5.7	10.5		Black or Black British	-	-
	Between £50,000 and £60,000	5.0	9.8		Other ethnic group	0.7	-
	Between £60,000 and £70,000	5.7	3.3				
	Over £70,000	4.3	5.9				

Table A4.2 – User survey dataset summary table							
		Manston	Pudsey			Manston	Pudsey
	N	47	80		N	47	80
Question	Options	%	%	Question	Options	%	%
1.1 Approximately how often do you visit in the summer months?	Everyday	29.8	27.5	1.2 What are your reasons for visiting the park today? [select all that apply] [continued]	For peace and quiet	-	2.5
	Most Days	17.0	27.5		To enjoy flowers or trees	-	-
	Once or twice a week	40.4	20.0		To see birds or wildlife	-	1.3
	Once every two weeks	2.1	2.5		To get some fresh air	-	1.3
	Once a month	4.3	7.5		To keep fit	-	-
	Once or twice during season	6.4	15.0		To take a shortcut	27.7	16.3
	Never	-	-		To meet friends	-	-
1.2 What are your reasons for visiting the park today? [select all that apply]	Unanswered	-	-		To play bowls	-	2.5
	For a walk	14.9	16.3		Other	4.3	3.8
	To walk the dog	12.8	7.5	1.3 Are these the main reasons you would usually visit the park in the summer?	Unanswered	-	-
	To entertain children	46.8	46.3		Yes	100.0	100.0
	To play sport or games	-	-		No	-	-
	To attend an event	-	-				
	To watch sport or games	-	-				
	To relax or think	-	-				

		Manston	Pudsey			Manston	Pudsey
	N	47	80		N	47	80
Question	Options	%	%	Question	Options	%	%
1.4 Approximately how often do you visit in the winter months?	Everyday	21.3	11.3	1.5 What are the main reasons you visit the park in the winter? [select all that apply] [continued]	To see birds or wildlife	2.1	2.5
	Most Days	6.4	11.3		To get some fresh air	6.4	1.3
	Once or twice a week	34.0	30.0		To keep fit	-	-
	Once every two weeks	2.1	3.8		To take a shortcut	31.9	21.3
	Once a month	4.3	16.3		To meet friends	4.3	-
	Once or twice during season	12.8	20.0		To play bowls	-	-
	Never	19.1	7.5		Other	-	2.5
1.5 What are the main reasons you visit the park in the winter? [select all that apply]	Unanswered	21.3	-	1.6 Where have you travelled from today to visit the park?	Unanswered	-	-
	For a walk	23.4	40.0		Home	95.7	85.0
	To walk the dog	17.0	5.0		Work	-	10.0
	To entertain children	23.4	33.8		Shops	2.1	5.0
	To play sport or games	-	-		Other	2.1	-
	To attend an event	-	-	1.7 How have you travelled here?	Unanswered	-	-
	To watch sport or games	-	-		On foot	80.9	56.3
	To relax or think	-	-		By car	14.9	37.5
	For peace and quiet	-	2.5		By bus	4.3	5.0
	To enjoy flowers or trees	4.3	-		Other	-	1.3

		Manston	Pudsey			Manston	Pudsey
	N	47	80		N	47	80
Question	Options	%	%	Question	Options	%	%
1.8 Observe – Is respondent alone or in a group	Alone	34.0	56.3	2.4 What is your employment status?	Unanswered	-	-
	In group	66.0	43.8		Employed full time	14.9	26.3
1.9a Do you use another park more often than this one?	Unanswered	-	-		Employed part time	19.1	11.3
	Yes	23.4	23.8		Self-employed	4.3	8.8
	No	76.6	76.3		Unemployed	2.1	10.0
2.2 Observe – Gender	Female	70.2	61.3		Retired	51.1	36.3
	Male	29.8	38.8		Student	4.3	-
2.3 Please indicate your age	Unanswered	-	6.3		Homemaker	4.3	1.3
	18-24	4.3	1.3		Sick/Disabled	-	2.5
	25-34	10.6	10.0		Other	-	3.8
	35-44	17.0	13.8	2.5 Do you have or look after children under the age of 13?	Unanswered	-	-
	45-54	8.5	16.3		Yes	61.7	67.5
	55-64	21.3	20.0		No	38.3	32.5
	65-74	29.8	18.8	2.6 do you have access to a private garden?	Unanswered	-	-
	75-84	8.5	10.0		Yes	100.0	82.5
	85+	-	3.8		No	-	17.5

Appendix 5: Coding Structure

The table provided in this appendix offers a summary of the final coding structure for theme codes that evolved out of the analysis of behaviour maps, the qualitative sections of social surveys, interviews and photographs. Following modelling, the outputs of statistical methods were also added to NVivo and insights obtained were coded into this structure.

Table A5.1 - Summary of Coding Structure for Theme Codes			
Access	Convenience		
	Spontaneity		
	Displacement		
Affordance	Outdoors		
	Topography		
	Openness or Space		
	Fresh Air		
	Shelter		
	Nature	Existence	
Age	Children		
	Elderly		
	Youth or Teenagers		
Agency	Choice		
	Need		
Atmosphere	Fear or Intimidation		
	Friendliness		
	Seclusion or Privacy		
	Sound	Peace	
		Swearing	
		Laughter	
	Suspicion		
Attitudes	Civic Pride		
	Entitlement		
	Far-sighted		
	Laziness		
	Overfamiliar or Bored		
	Ownership		
	Philanthropy		
	Taken for Granted		
Attraction			
Avoidance			

Character	Attractiveness				
	Quality				
	Uniqueness				
Community	Attachment				
	Big Society				
	Organisation				
Comparison	Positive	Improvement			
	Negative	Nostalgia			
		Out of touch			
		Continued Negativity			
Concerns	Antisocial Behaviour	Drug use			
		Fire			
		Graffiti			
		Youth Presence			
		Vandalism			
	Dogs	Control of Dogs			
		Fouling			
	Litter				
	Quality of Life				
	Safety				
User Conflict					
Context	Economic Climate				
	National Sports Events				
	Personal Context	Garden	Technology		
		Leisure			
		Lifecourse			
	Residential Selection				
	Seasonality			Weather	
	Time of Day or Week			Light	
	Transport			Public	
				Private	
Continuity					

Control	Out of Place	
	Regulation	
	Supervision	
Cost		
Council	Maintenance	
Crowding		
Current Use	Activity and Exercise	
	Health	
	Sport	Bowling
		Football
		Tennis
	Creative Pursuits	
	Dog walking	
	Education	
	Events	Advertising
	Indirect Benefits	Environment
		Reputation
	Passive Use	
	Picnic	
	Play	
	Shortcut	
	Social Interaction	
Park Definition		
Enjoyment		
Family	Generations	
	Inclusions	
Features	Facilities	
	Layout or Design	
	Size	
	Water	
Future		
Independence		

Institutions	Church			
	Policy			
	School			
	Scouts or Brownies			
Investment				
Local	Location	Built Up		
		Social Housing		
		Town Decline		
		Youth Facilities		
	Proximity or Closeness			
	Service or Amenity			
Park Future	Conservation			
	Financing			Diversification
				Fundraising
				Donations
				Self sufficiency
	Loss			
	Voluntarism			Acceptable Jobs
Past	Heritage or History	Hey Day		
	Memory			
Potential				
Relative to other park				
Substitution				

Appendix 6: Full Quantitative Analyses

This appendix provides full versions of the quantitative analyses conducted in this study. Tables A6.1a and b detail initial binomial logistic regression analyses conducted in both datasets, exploring factors that make an individual more likely to be a frequent (1) versus infrequent summer user (0) of case study spaces.

Tables A6.2a and b provide results from logistic regression analyses conducted to investigate predictors of frequent (1) versus infrequent (0) use in the winter season.

Tables A6.3a and b show the values and significance of Kendall's tau correlation coefficients calculated to explore relationships levels of use and levels of agreement between value-related Likert items. For information, the values of n on which these calculations are based are also provided.

Table A6.1a - Binomial logistic regression analysis exploring factors that made respondents more likely to be frequent (1) versus infrequent (0) summer users of Manston Park				
Variable	Exp (B)	Coefficient	Standard Error	Sig.
Shortest distance from pedestrian access point	0.997	-0.003	0.001	0.010**
Gender (ref – Female)	0.986	-0.014	0.490	0.977
Age (ref – 65+)				
18-34	2.136	0.759	1.043	0.467
35-44	1.049	0.048	1.147	0.967
45-54	1.093	0.089	1.089	0.935
55-64	2.952	1.082	0.793	0.172
Employment Status (ref – Retired)				
Employed F/T	0.188	-1.669	0.953	0.080
Employed P/T	0.174	-1.747	1.034	0.091
Other	0.207	-1.577	0.943	0.095
Children (ref – No)	5.932	1.780	0.533	0.001***
Dog Walking (ref – Not Selected)	6.536	1.877	0.638	0.003***
Watch Sports (ref – Not Selected)	2.492	0.913	0.743	0.219
Constant	1.744	0.556	0.696	0.424
N	137			
Cox & Snell R Squared	0.296			
Nagelkerke R Squared	0.399			
Log pseudolikelihood	137.219 (improvement of 48.116)			
	(initial value = 185.335)			
[NOTE: *** = p<0.01, ** = p<0.05]				

Table A6.1b - Binomial logistic regression analysis exploring factors that made respondents more likely to be frequent (1) versus infrequent (0) summer users of Pudsey Park				
Variable	Exp (B)	Coefficient	Standard Error	Sig.
Shortest distance from pedestrian access point	0.998	-0.002	0.001	0.067
Gender (ref – Female)	1.804	0.590	0.388	0.128
Age (ref – 65+)				
18-34	2.683	0.987	1.234	0.424
35-44	4.491	1.502	1.248	0.229
45-54	5.736	1.747	1.278	0.172
55-64	6.631	1.892	1.123	0.092
Employment Status (ref – Retired)				
Employed F/T	0.075	2.590	1.198	0.031**
Employed P/T	0.119	2.125	1.166	0.068
Other	0.160	1.835	1.207	0.128
Children (ref – No)	2.077	0.731	0.426	0.086
Access to Garden (ref – Yes)	2.362	0.859	0.634	0.175
Dog Walking (ref – Not Selected)	4.594	1.525	0.639	0.017**
Attend Events (ref – Not Selected)	1.048	0.047	0.511	0.927
Constant	1.632	0.490	0.541	0.365
N	151			
Cox & Snell R Squared	0.176			
Nagelkerke R Squared	0.235			
Log pseudolikelihood	179.688 (improvement of 29.318)			
	(initial value =209.006)			
[NOTE: *** = p<0.01, ** = p<0.05]				

Table A6.2a - Binomial logistic regression analysis exploring factors that made respondents more likely to be frequent (1) versus infrequent (0)winter users of Manston Park				
Variable	Exp (B)	Coefficient	Standard Error	Sig.
Shortest distance from pedestrian access point	0.997	-0.003	0.001	0.040**
Gender (ref – Female)	0.600	-0.511	0.602	0.396
Age (ref – 65+)				
18-34	0.333	-1.100	1.173	0.348
35-44	0.077	-2.564	1.530	0.094
45-54	0.112	-2.186	1.329	0.100
55-64	1.025	0.024	0.852	0.977
Employment Status (ref – Retired)				
Employed F/T	0.744	-0.296	1.080	0.784
Employed P/T	0.770	-0.261	1.134	0.818
Other	0.955	-0.046	1.011	0.964
Children (ref – No)	5.014	1.612	0.621	0.009***
Dog Walking (ref – Not Selected)	32.685	3.487	0.733	0.001***
Constant	0.957	-0.044	0.815	0.957
N	137			
Cox & Snell R Squared	0.372			
Nagelkerke R Squared	0.540			
Log pseudolikelihood	96.194 (improvement of 63.639)			
	(initial value =159.833)			
[NOTE: *** = p<0.01, ** = p<0.05]				

Table A6.2b - Binomial logistic regression analysis exploring factors that made respondents more likely to be frequent (1) versus infrequent (0)winter users of Pudsey Park				
Variable	Exp (B)	Coefficient	Standard Error	Sig.
Shortest distance from pedestrian access point	0.998	-0.002	-0.001	0.004***
Gender (ref – Female)	1.152	0.142	0.398	0.721
Age (ref – 65+)				
18-34	0.429	-0.845	1.014	0.404
35-44	0.680	-0.386	1.025	0.707
45-54	1.019	0.019	1.023	0.985
55-64	1.651	0.501	0.781	0.521
Employment Status (ref – Retired)				
Employed F/T	0.362	-1.016	0.910	0.264
Employed P/T	0.414	-0.883	0.896	0.324
Other	0.718	-0.331	0.907	0.715
Children (ref – No)	1.234	0.210	0.426	0.621
Access to Garden (ref – Yes)	1.772	0.572	0.618	0.354
Dog Walking (ref – Not Selected)	3.694	1.307	0.576	0.023**
Constant	2.346	0.853	0.525	0.104
N	150			
Cox & Snell R Squared	0.186			
Nagelkerke R Squared	0.252			
Log pseudolikelihood	169.328 (improvement of 30.842)			
	(initial value = 200.170)			
[NOTE: *** = p<0.01, ** = p<0.05]				

Table A6.3a - Kendall's tau correlation coefficients exploring relationships between frequency of use and value-related Likert statements in the Manston Park dataset				
Variable 1	Variable 2	N	Kendall's T	Sig
Freq. Summer	Freq. Winter	140	0.809	0.001***
	Indirect Use	136	0.069	0.213
	Option	137	0.188	0.014**
	Recollection	138	0.128	0.067
	Philanthropy	139	0.044	0.302
	Existence	138	0.048	0.287
	Bequest	139	0.155	0.035
	Heritage	139	-0.001	0.496
Freq. Winter	Indirect Use	136	0.125	0.074
	Option	137	0.185	0.015**
	Recollection	138	0.168	0.024**
	Philanthropy	139	0.088	0.153
	Existence	138	0.035	0.342
	Bequest	139	0.131	0.063
	Heritage	139	0.054	0.223
Indirect Use	Option	135	0.376	0.001***
	Recollection	135	0.296	0.001***
	Philanthropy	136	0.368	0.001***
	Existence	135	0.425	0.001***
	Bequest	136	0.332	0.001***
	Heritage	136	0.434	0.001***
Option	Recollection	137	0.337	0.001***
	Philanthropy	137	0.596	0.001***
	Existence	136	0.512	0.001***
	Bequest	137	0.540	0.001***
	Heritage	137	0.342	0.001***
Recollection	Philanthropy	138	0.477	0.001***
	Existence	137	0.431	0.001***
	Bequest	138	0.477	0.001***
	Heritage	138	0.444	0.001***
Philanthropy	Existence	138	0.527	0.001***
	Bequest	139	0.817	0.001***
	Heritage	139	0.450	0.001***
Existence	Bequest	138	0.584	0.001***
	Heritage	138	0.337	0.001***
Bequest	Heritage	139	0.331	0.001***

Table A5.3b - Kendall's tau correlation coefficients exploring relationships between frequency of use and value-related Likert statements in the Pudsey Park dataset				
Variable 1	Variable 2	N	Kendall's T	Sig
Freq. Summer	Freq. Winter	152	0.796	0.001***
	Indirect Use	150	0.090	0.136
	Option	150	0.237	0.002***
	Recollection	152	0.201	0.007***
	Philanthropy	152	0.207	0.005***
	Existence	152	0.238	0.002***
	Bequest	152	0.246	0.001***
	Heritage	151	0.077	0.125
Freq. Winter	Indirect Use	149	0.044	0.299
	Option	149	0.170	0.019**
	Recollection	151	0.163	0.023**
	Philanthropy	151	0.201	0.007***
	Existence	151	0.253	0.001***
	Bequest	151	0.216	0.004***
	Heritage	150	0.092	0.086
Indirect Use	Option	148	0.284	0.001***
	Recollection	150	0.310	0.001***
	Philanthropy	150	0.280	0.001***
	Existence	150	0.369	0.001***
	Bequest	150	0.276	0.001***
	Heritage	149	0.123	0.042**
Option	Recollection	150	0.520	0.001***
	Philanthropy	150	0.516	0.001***
	Existence	150	0.579	0.001***
	Bequest	150	0.588	0.001***
	Heritage	150	0.317	0.001***
Recollection	Philanthropy	152	0.452	0.001***
	Existence	152	0.380	0.001***
	Bequest	152	0.525	0.001***
	Heritage	151	0.464	0.001***
Philanthropy	Existence	152	0.453	0.001***
	Bequest	152	0.774	0.001***
	Heritage	151	0.411	0.001***
Existence	Bequest	152	0.513	0.001***
	Heritage	151	0.245	0.001***
Bequest	Heritage	151	0.409	0.001***

References

- Baert, P. (2005) Critical Realism; In: Baert, P. *Philosophy of the Social Sciences: Towards Pragmatism*, Cambridge: Polity Press
- Balram, S. and Dragičević, S. (2005) Attitudes toward urban green spaces: integrating questionnaire survey and collaborative GIS techniques to improve attitude measurements, *Landscape and Urban Planning* 71 (2-4): 147-162
- Barbosa, O., Tratalos, J.A., Armsworth, P.R, Davies, R.G., Fuller, R.A., Johnson, P. and Gaston, K. (2007) Who benefits from access to green space? A case study from Sheffield, UK, *Landscape & Urban Planning* 83: 187-195
- Barnes, T.J. (2009) "Not Only... But Also": Quantitative and Critical Geography, *The Professional Geographer*, 61 (3): 292-300
- Baxter, J. (2010) Case Studies in Qualitative Research In: Hay, I. *Qualitative Research Methods in Human Geography*, Oxford University Press Ontario pp81-97
- Bazeley, P. (2003) Computerized Data Analysis for Mixed Methods Research, In: Tashakkori, A. and Teddlie, C. (eds.) *Handbook of mixed methods in social & behavioural research*, Thousand Oaks: SAGE
- Bazeley, P. (2006) The Contribution of Computer Software to Integrating Qualitative and Quantitative Data and Analyses, *Research in the Schools* 13(1): 64-74
- Benedict, M.A. & McMahon, E.T. (2002) Green infrastructure: smart conservation for the 21st century. *Renewable Resources Journal* (Autumn Edition)
- Bhaskar, R. (1975) A Realist Theory of Science, Leeds: Leeds Books
- Bhaskar, R (1979) The Possibility of Naturalism, Brighton: Harvester Press
- Big Lottery Fund (2013) BIG backed scheme puts volunteers at the heart of parks, http://www.biglotteryfund.org.uk/global-content/press-releases/england/140213_eng_love-parks_volunteers-at-heart-of-parks (accessed 12.11.2013)
- Bird, W. (2010) Foreword, In: Ward Thompson, C., Aspinall, P. and Bell, S. (eds.) *Innovative Approaches to Researching Landscape and Health: Open Space: People Space 2*, Routledge: Abingdon, UK
- Bjerke, T. Ostdahl, T., Thrane, C. and Strumse, E. (2006) Vegetation density of urban parks and perceived appropriateness for recreation, *Urban Forestry & Urban Greening* 5: 35-44
- Boterman, W.R. (2012) Residential mobility of urban middle classes in the field of parenthood, *Environment and Planning A*, 44(10): 2397-2412

- Bowler, D.E., Buyung-Ali, L., Knight, T.M. and Pullin, A.S. (2010) Urban greening to cool towns and cities: A systematic review of the empirical evidence, *Landscape & Urban Planning* 97: 147-155
- Bradley, C. and Millward, A. (1986) Successful green space – do we know it when we see it? *Landscape Research* 11(2): 2-8
- Brehm, J.M. (2007) Community Attachment: The Complexity and Consequence of the Natural Environment Facet, *Human Ecology* 35(4): 477-488
- Bridge, G. (2002) The Neighbourhood and Social Networks, Centre for Neighbourhood Research Summary Paper
- Brown, G. and Raymond, C. (2007) The relationship between place attachment and landscape values: Toward mapping place attachment, *Applied Geography* 27: 89-111
- Bryman, A. (2006) Integrating quantitative and qualitative research: how is it done?, *Qualitative Research* 6(1): 97-113
- Bryman, A. (2007) Barriers to Integrating Quantitative and Qualitative Research, *Journal of Mixed Methods Research* 1(1): 8-2
- Bryman, A. (2008) Social Research Methods, 3rd Edition, Oxford University Press: Oxford
- Bullock, C.H. (2008) Valuing Urban Green Space: Hypothetical Alternatives and the Status Quo, *Journal of Environmental Planning and Management* 51(1):15-35
- Burgess, J., Harrison, C.M. and Limb, M. (1988) People, Parks and the Urban Green: A Study of Popular Meanings and Values Open Spaces in the City, *Urban Studies* 25: 455-473
- Byrne, J. and Wolch, J. (2009) Nature, race and parks: past research and future directions for geographic research, *Progress in Human Geography* 33 (6):743-765
- CABE (2001) The value of urban design, London: CABE
- CABE (2006) The value handbook: Getting the most from your buildings and public spaces, London: CABE
- CABE space (2005a) Parks and Squares: Who cares? London: CABE
<http://webarchive.nationalarchives.gov.uk/20110118095356/http://www.cabe.org.uk/files/parks-and-squares-who-cares.pdf> (accessed 20.02.2014)
- CABE space (2005b) Does money grow on trees? London: CABE
- CABE space (2006) Urban parks: Do you know what you're getting for your money? London: CABE
- CABE space (2009) Making the invisible visible: the real value of park assets, London: CABE

- Charmaz, K. (2006) Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis, London: SAGE
- Chemero, A. (2003) An Outline of a Theory of Affordances, *Ecological Psychology* 15(2):181-195
- Chen, B., Adimo, O.A. and Bao, Z. (2009) Assessment of aesthetic quality and multiple functions of urban green space from the users perspective: the case of Hangzhou Flower Garden, China, *Landscape and Urban Planning* 93: 76-82
- Chiesura, A. (2004) The role of urban parks for the sustainable city, *Landscape and Urban Planning* 68: 129-138
- Choumert, J. and Salanié, J. (2008) Provision of urban green space: some insights from economics, *Landscape Research* (3): 331-345
- Coles, R.W. and Bussey, S.C. (2000) Urban forest landscapes in the UK – progressing the social agenda, *Landscape & Urban Planning* 52: 181-188
- Coley, R.L., Kuo, F.E. and Sullivan, W.C. (1997) Where does community grow? The social context created by nature in urban public housing, *Environment & Behaviour* 29: 468-494
- Concise Oxford English Dictionary (2008) – value, n. The Concise Oxford English Dictionary, Twelfth edition, Ed. Catherine Soanes and Angus Stevenson, Oxford University Press 2008. Oxford Reference Online, University of St Andrews 26 April 2011 <http://www.oxfordreference.com/views/ENTRY.html?subview=Main&entry=t23.e62796> (accessed 26. 04.2011)
- Coolen, H. and Meesters, J. (2012) Private and public green spaces: meaningful but different settings, *Journal of Housing and the Built Environment* 27:49-67
- Cope, M. (2010) Coding Qualitative Data In: Hay, I. Qualitative Research Methods in Human Geography, Oxford University Press Ontario pp281-294
- Cosco, N.G., Moore, R.C. and Islam, M.Z. (2010) Behavior Mapping: A Method for Linking Preschool Physical Activity and Outdoor Design, *Medicine and Science in Sports Exercise* pp 513-519
- Coulter, R. (2013) Wishful thinking and the abandonment of moving desires over the life course, *Environment and Planning A* 45(8):1944-1962
- Crang, M. (2000) Public Space, Urban Space and Electronic Space: Would the Real City Please Stand Up?, *Urban Studies* 37(2): 301-317
- Creswell, J.W. (2011) Controversies in Mixed Methods Research, In: Denzin, N.K. and Lincoln, Y.S. (eds.) (2011) *The SAGE Handbook of Qualitative Research*, Thousand Oaks, California: SAGE
- Creswell, J.C. and Plano Clark, V.L. (2007) Designing and Conducting Mixed Methods Research, Thousand Oaks: SAGE

- Crow, G. and Allan, G. (1994) Community Life: An Introduction to local social relations, Harvester Wheatsheaf: London
- Crowards, T. (1997) Nonuse Values and the Environment: Economic and Ethical Motivations, *Environmental Values* 6:143-167
- Curry, P. (2006) Ecological Ethics: An Introduction, Cambridge: Polity Press
- Danermark, B., Ekström, M., Jakobsen, L. and Karlsson, J.C. (2002) Explaining Society: Critical realism in the social sciences, Routledge: Abingdon, UK
- Day Biehler, D. and Simon, G.L. (2010) The Great Indoors: Research frontiers on indoor environments as active political-ecological spaces, *Progress in Human Geography* 35(2): 172-192
- de Vries, S. 2010 Nearby nature and human health: looking at mechanisms and their implications In: Ward Thompson, C., Aspinall, P. and Bell, S. (eds.) *Innovative Approaches to Researching Landscape and Health: Open Space: People Space 2*, Routledge: Abingdon, UK
- de Vries, S., Verheij, R.A., Groenewegen, P.P. and Spreeuwenberg, P. (2003) Natural environments – healthy environments? An exploratory analysis of the relationship between green space and health, *Environmental Planning* 35: 1717-1731
- del Saz Salazar, S. and García Menéndez, L. (2007) Estimating the non-market benefits of an urban park: Does proximity matter?, *Land Use Policy* 24: 296-305
- del Saz Salazar, S. and Rausell-Köster, P. (2008) A Double-Hurdle model of urban green areas valuation: Dealing with zero responses, *Landscape and Urban Planning* 84 (3-4): 241-251
- Denscombe, M. (2008) Communities of Practice: A Research Paradigm for the Mixed Methods Approach, *Journal of Mixed Methods Research* 2 (3): 270-283
- Department of Transport, Local Government and the Regions (2002) Green Spaces, Better Places. London: DLTR
- Diamond, P.A. and Hausman, J.A. (1994) Contingent Valuation: Is Some Number Better than No Number? *Journal of Economic Perspectives* 8(4): 45-64
- DiMaggio, P., Hargittai, E., Neuman, W.R. and Robinson, J.P. (2001) Social Implications of the Internet, *Annual Review of Sociology* 27:307-336
- Dunn, K. (2010) Interviewing, In: Hay, I. *Qualitative Research Methods in Human Geography*, Oxford University Press Ontario pp101-138
- Dunnett, N., Swanwick, C. and Woolley, H. (2002) Improving Parks, Play Areas and Green Spaces. London: ODPM
- Dwyer, J.F., McPherson, G., Schroeder, H.W. and Rowntree, R.A. (1992) Assessing the benefits and costs of the urban forest, *Journal of Arboriculture* 18(5): 227-234

- Elwood, S. (2010) Mixed Methods: Thinking, Doing and Asking in Multiple Ways, In: DeLyser, D., Herbert, S., Aitken, S., Crang, M and McDowell, L. (eds.) (2010) *The SAGE Handbook of Qualitative Geography*, SAGE: London
- Field, A. (2009) Discovering Statistics Using SPSS. Third Edition. London: SAGE
- Fincher, R. and Shaw, K. (2011) Enacting separate social worlds: 'International' and 'local' students in public space in central Melbourne, *Geoforum* 42: 539-549
- Finney, N. (2011) Understanding ethnic differences in the migration of young adults within Britain from a lifecourse perspective, *Transactions of the Institute of British Geographers*, 36 (3):455-470
- Fjørtoft, I. (2001) The Natural Environment as a Playground for Children: The Impact of Outdoor Play Activities in Pre-Primary School Children, *Early Childhood Education Journal* 29(2):111-117
- Flyvbjerg, B. (2006) Five Misunderstandings About Case-Study Research, *Qualitative Inquiry* 12 (2): 219-245
- Forrest, R. (2008) Who cares about neighbourhoods? *International Social Science Journal* 59(191):129-141
- Forrest, R. and Kearns, A. (2001) Social Cohesion, Social Capital and the Neighbourhood, *Urban Studies* 38(12):2125-2143
- Fuller, R.A., Irvine, K.N., Devine-Wright, P., Warren, P.H. and Gaston, K.J. (2007) Psychological benefits of greenspace increase with biodiversity, *Biology Letters* 3: 390-394
- Fyfe, N.R. (1992) Observations on observations, *Journal of Geography in Higher Education* 16(2):127-133
- Germann – Chiari, C. and Seeland, K. (2004) Are urban green spaces optimally distributed to act as places for social integration? Results of a geographical information system (GIS) approach to urban forestry research. *Forest Policy & Economics* 6: 3-13
- Gerring, J. (2007) Case Study Research: Principles and Practices, Cambridge: Cambridge University Press
- Gibson, J. J. (1979). The ecological approach to visual perception. Boston: Houghton Mifflin
- Giles-Corti, B. and Donovan, R.J. (2002) The relative influence of individual, social and physical environment determinants of physical activity, *Social Science & Medicine* 54: 1793-1812
- Glaser, B.G. (2002) Constructivist Grounded Theory? *Forum: Qualitative Social Research/Sozialforschung* 3(3) Article 12, Available at: <http://www.qualitative-research.net/index.php/fqs/article/view/825/1793> (accessed 12.01.2011)

- Glaser, B.G. and Strauss, A.L. (1967) The Discovery of Grounded Theory: Strategies of Qualitative Research, London: Weidenfeld and Nicholson
- Gobster, P.H. (1998) Urban parks as green walls or green magnets? Interracial relations in neighbourhood boundary parks, *Landscape & Urban Planning* 41: 43-55
- Goddard, M.A., Dougill, A.J. and Benton, T.G. (2010) Scaling up from gardens: biodiversity conservation in urban environments, *Trends in Ecology and Evolution* 25(2): 90-98
- Goetz, A.R., Vowles, T.M. and Tierney, S. (2009) Bridging the Qualitative-Quantitative Divide in Transport Geography, *The Professional Geographer*, 61 (3): 323-335
- Gold, R.L. (1958) Roles in Sociological Field Observations, *Social Forces* 36 (3): 217-223
- Graham, S. (1998) The end of geography or the explosion of place? Conceptualizing space, place and information technology, *Progress in Human Geography* 22(2): 165-185
- Graham, S. (2002) Bridging Urban Digital Divides? Urban Polarisation and Information and Communications Technologies (ICTs), *Urban studies* 39(1): 33-56
- Grahn, P. and Stigsdotter, U.A. (2003) Landscape planning and stress, *Urban Forestry and Urban Greening* 2: 1-18
- Granovetter, M.S. (1973) The Strength of Weak Ties, *American Journal of Sociology* 78(6): 1360-1380
- Greene, J.C. and Caracelli, V.J. (1997) Defining and Describing the Paradigm Issue in Mixed-Method Evaluation, *New Directions for Evaluation* 74: 5-17
- Greene, J.C. (2008) Is Mixed Methods Social Inquiry a Distinctive Methodology? *Journal of Mixed Methods Research* 2(1): 7-22
- Greene, J.C., Caracelli, V.J. and Graham, W.F. (1989) Toward a Conceptual Framework for Mixed-Method Evaluation Designs, *Educational Evaluation and Policy Analysis* 11(3): 255-274
- Hammitt, W.E (2002) Urban forests and parks as privacy refuges, *Journal of Arboriculture* 28: 19-26
- Hanley, N., Mourato, S. and Wright, R.E. (2001) Choice Modelling Approaches: A Superior Alternative For Environmental Valuation?, *Journal of Economic Surveys* 15(3): 435-462
- Hanley, N., Shogren, J.F. and White, B. (1997) Environmental Economics: In Theory and Practice, Basingstoke: Macmillan Press Ltd
- Hanley, N., Shogren, J.F. and White, B. (2001) Introduction to Environmental Economics, Oxford: Oxford University Press

- Heft, H. (2010) Affordances and the perception of the landscape: an inquiry into environmental perception and aesthetics, In: Ward Thompson, C., Aspinall, P. and Bell, S. (eds.) *Innovative Approaches to Researching Landscape and Health: Open Space: People Space 2*, Routledge: Abingdon, UK
- Heritage Lottery Fund (2014) State of UK Public Parks: renaissance to risk? London: Heritage Lottery Fund. Available at: http://www.hlf.org.uk/aboutus/howwework/Documents/StateOfUKParks2014_advocacy.pdf (accessed 07.10.2014)
- Hidalgo, M.C. and Hernández, B. (2001) Place attachment: conceptual and empirical questions, *Journal of Environmental Psychology* 21: 273-281
- Hillsdon, M., Panter, J., Foster, C. and Jones, A. (2006) The relationship between access and quality of urban green space with population physical activity, *Public Health* 120: 1127-1132
- Hitchings, R. (2010) Urban greenspace from the inside out: An argument for the approach and a study with city workers, *Geoforum* 41(6): 855-864
- Holland, C., Clark, A., Katz, J. and Peace, S. (2007) Social Interactions in Urban Public Places. Joseph Rowntree Foundation: The Policy Press available at (accessed 15.09.10)
- Home, R., Hunziker, M. and Bauer, N. (2012) Psychosocial Outcomes as Motivations for Visiting Nearby Urban Green Spaces, *Leisure Studies* 34: 350-365
- Horowitz, J.K. and McConnell, K.E. (2002) A Review of WTA/WTP Studies, *Journal of Environmental Economics and Management* 44: 426-227
- House of Commons Communities and Local Government Committee (2011) Localism: Third Report of Session 2010–2012: Volume I: Report, together with formal minutes, oral and written evidence, London: The Stationery Office Limited.
- Howe, K.R. (1988) Against the Quantitative-Qualitative Incompatibility Thesis or Dogmas Die Hard, *Educational Researcher* 17 (8):10-16
- Hur, M., Nasar, J.L. and Chun, B. (2009) Neighbourhood satisfaction, physical and perceived naturalness and openness, *Journal of Environmental Psychology*, Online First
- Irvine, K.N., Fuller, R.A., Devine-Wright, P., Tratalos, J., Payne, S.R., Warren, P.H., Lomas, K.J. and Gaston, K.J. (2010) Ecological and Psychological Value of Urban Green Space, In: Jenks, M. and Jones, C. (eds.) (2010) *Dimensions of the sustainable city*, London: Springer
- James, P., Tzoulas, K., Adams, M.D., Barber, A., Box, J., Brueste, J., Elmqvist, T., Frith, M., Gordon, C., Greening, K.L., Handley, J., Haworth, S., Kazmierczak, A.E., Johnston, M., Korpela, K., Moretti, M., Niemela, J., Pauleit, S., Roe, M.H., Sadler, J.P. and Ward Thompson, C. (2009) Towards an integrated understanding of green space in the European built environment, *Urban Forestry & Urban Greening* 8: 65-75

- Johnson, R.B. and Onwuegbuzie, A.J. (2004) Mixed Methods Research: A Research Paradigm Whose Time Has Come, *Educational Researcher* 33 (7): 14-26
- Johnson, R.B., Onwuegbuzie, A.J. and Turner, L.A. (2007) Toward a Definition of Mixed Methods Research, *Journal of Mixed Methods Research* 1: 112 - 133
- Katz, J.E., Rice, R.E. and Aspden, P. (2001) The Internet 1995-2000: Access, Civic Involvement and Social Interaction, *American Behavioural Scientist* 45(3): 405-419
- Kazmierczak, A. (2013) The contribution of local parks to neighbourhood social ties, *Landscape and Urban Planning* 109(1):31-44
- Kazmierczak, A.E. and James, P. (2007) The role of urban green spaces in improving social inclusion, In: Amaratunga, D., Haigh, R., Ruddock, L. and Alshawi, M. (eds.) *Proceedings of the 7th international postgraduate conference in the built and human environment 27th -29th March 2007, Salford*, 354-365
- Kearns, R.A. (2010) Seeing with Clarity: Undertaking Observational Research, In: Hay, I (ed.) *Qualitative Research Methods in Human Geography*, Third Edition Oxford: Oxford University Press
- Kim, J. and Kaplan, R. (2004) Physical and psychological factors in sense of community – new urbanist Kentlands and nearby orchard village, *Environment and Behaviour* 36: 313-340
- Kong, F. Yin, H. and Nakagoshi, N. (2007) Using GIS and landscape metrics in the hedonic price modelling of the amenity value of urban green space: A case study in Jinan City, China, *Landscape and Urban Planning*: 79 (3-4):240-252
- Kuo, F.E. (2001) Coping with Poverty – Impacts of Environment and Attention in the Inner City, *Environment and Behaviour* 33(1): 5-34
- Kuo, F.E. and Sullivan, W.C. (2001a) Environment and Crime in the inner city: does vegetation reduce crime? *Environment & Behaviour* 33(3): 343-367
- Kuo, F.E. and Sullivan, W.C. (2001b) Aggression and Violence in the Inner City: Effects of Environment via Mental Fatigue, *Environment and Behaviour* 33(4): 543-571
- Kuo, F.E., Sullivan, W.C., Coley, R.L. and Brunson, L. (1998) Fertile Ground for Community: Inner-City Neighbourhood Common Spaces, *American Journal of Community Psychology* 26 (6):823-851
- Kweon, B-S., Sullivan, W.C. and Wiley, A.R. (1998) Green Common Spaces and the Social Integration of Inner-City Older Adults, *Environment and Behaviour* 30 (6): 832-858
- Kyttä, M. (2004) The extent of children's independent mobility and the number of actualized affordances as criteria for child-friendly environments, *Journal of Environmental Psychology* 24(2):179-198

- Latham, A., McCormack, D., McNamara, K. and McNeill, D. (2009) Key Concepts in Urban Geography, SAGE ebook
- Leeds City Council (2006) - Forests of Leeds - <http://www.leeds.gov.uk/fol/forest.html> [accessed 26.07.11]
- Leeds City Council (2009a) - Leeds Strategic Plan – Environment - <http://www.leedsinitiative.org/lsp/page.aspx?id=6092> (accessed 13.11.09)
- Leeds City Council (2009b) A Parks and Green Space Strategy for Leeds, Leeds: Leeds City Council, Available at: <http://www.leeds.gov.uk/leisure/Pages/Parks-and-countryside.aspx> (accessed 26.02.2014)
- Leeds City Council (2011a) - Find out about Local Parks - http://www.leeds.gov.uk/About_Leeds/parks_and_gardens.aspx (accessed 26.07.2011)
- Leeds City Council (2011b) - Golf Clubs - http://www.leeds.gov.uk/Leisure_and_culture/Sports_clubs_and_centres/Municipal_golf_courses.aspx#Our_golf_courses (accessed 26.07.2011)
- Leeds City Council (2011c) - Play facilities - http://www.leeds.gov.uk/files/2007/week31/inter__614c9abe-e7f5-4939-bfe9-e597fbd1e82f_6c7a734b-ead3-4499-b2c8-e4488430afbe.pdf (accessed 26.07.2011)
- Leeds City Council (2011d) Public Tennis Courts - <http://www.leeds.gov.uk/files/Internet2007/2010/48/park%20courts%20with%20postcodes%20in%20leeds.pdf> (accessed 26.07.2011)
- Leeds City City Council (2011e) - Bowling Greens with postcodes - <http://www.leeds.gov.uk/files/Internet2007/2009/13/bowling%20greens%20with%20postcode.pdf> (accessed 26.07.2011)
- Leeds City Council (2014a)- City Plans - <http://www.leeds.gov.uk/council/Pages/City-plans.aspx> (accessed 26.02.2014)
- Leeds City Council (2014b) Parks and countryside, <http://www.leeds.gov.uk/leisure/Pages/Parks-and-countryside.aspx> (accessed 26.02.2014)
- Leeds, Live it, Love it (2011) - Places to go - <http://www.leedsliveitloveit.com/visitors/places-to-go~category/11> (accessed 26.07.2011)
- Lewicka, M. (2010) What makes neighbourhood different from home and city? Effects of place scale on place attachment, *Journal of Environmental Psychology* 30: 35-51
- Lewicka, M. (2011) Place attachment: How far have we come in the last 40 years? *Journal of Environmental Psychology* 31: 207-230

- Local Government Association (2012) Funding outlook for councils from 2010/11 to 2019/20: Preliminary modelling, London: Local Government Association. Available at: http://www.local.gov.uk/c/document_library/get_file?uuid=18123989-d119-495e-9d79-a2e0a07c826b&groupId=10180 (accessed 24.02.2014)
- Lockwood, M. (1999) Humans Valuing Nature: Synthesising Insights from Philosophy, Psychology and Economics, *Environmental Values* 8: 381-401
- López-Mosquera, N. and Sánchez, M. (2011) Emotional and satisfaction benefits to visitors as explanatory factors in the monetary valuation of environmental goods. An application to periurban green spaces, *Land Use Policy* 28: 151-166
- Lowenthal, D. (1985) The Past is a Foreign Country, Cambridge: Cambridge University Press
- Lutzenhiser, M. and Netusil, N.R. (2001) The Effect of Open Space on a Home's Sale Price, *Contemporary Economic Policy* 19(3): 291-298
- Maas, J., Spreeuwenberg, P., Van Winsum-Westra, M., Verheij, R.A., de Vries, S. and Groenewegen, P.P. (2009) Is green space in the living environment associated with people's feelings of social safety? *Environment and Planning A* 41: 1763-1777
- Maas, J., van Dillen, S.M.E., Verheij, R.A. and Groenewegen, P.P. (2009) Social contacts as a possible mechanism behind the relation between green space and health, *Health & Place* 15: 586-595
- MacLennan, D. and O'Sullivan, A. (2013) Localism, Devolution and Housing Policies, *Housing Studies* 28 (4): 599-615
- Mäkinen, M. and Tyrväinen, L. (2008) Teenage experiences of public green spaces in suburban Helsinki, *Urban Forestry & Urban Greening* 7: 277-289
- Mallet, S. (2004) Understanding home: a critical review of the literature, *The Sociological Review* 52 (1): 62-89
- Malmberg, B., Andersson, E and Subramanian, S.V. (2010) Links between ill health and regional economic performance: evidence from Swedish longitudinal data, *Environment and Planning A*: 42(5): 1210-1220
- Massey, D. (1991) A global sense of place, *Marxism Today*, June: 24-29
- Massey, D. (1994) A global sense of place, In: Massey, D. (1994) *Space, place and gender*. Cambridge: Polity Press
- McConnell, V. and Walls, M. (2005) The Value of Open Space: Evidence from Studies of Nonmarket Benefits, Washington: Resources For the Future, Available at: <http://www.rff.org/rff/Documents/RFF-REPORT-Open%20Spaces.pdf> (accessed 15.11.2013)

- McCormack, G.R., Rock, M., Toohey, A.M. & Highnell, D. (2010) Characteristics of urban parks associated with park use and physical activity: A review of qualitative research, *Health and Place* 16(4): 712 – 726
- McEvoy, P. and Richards, D. (2006) A critical realist rationale for using a combination of quantitative and qualitative methods, *Journal of Research in Nursing* 11(1) : 66-78
- McGuirk, P.M. and O'Neill, P. (2010) Using Questionnaires in Qualitative Human Geography, In: Hay, I. *Qualitative Research Methods in Human Geography*, Oxford University Press Ontario 191-216
- Meacham, S. (1999) Regaining Paradise: Englishness and the Early Garden City Movement, London: Yale University Press
- Miller, D. (2008) The uses of value, *Geoforum* 39: 1122-1132
- Mitchell, R. and Popham, F. (2008) Effect of exposure to natural environment on health inequalities: an observational population study, *Lancet* 372: 1655-1660
- Moore, R.C. and Cosco, N.G. (2010) Using behaviour mapping to investigate healthy outdoor environments for children and families: conceptual framework, procedures and applications, In: Ward Thompson, C, Aspinall, P. and Bell, S. (eds) (2010) *Innovative Approaches to Researching Landscape and Health: Open Space People Space 2*, Abingdon, Routledge.
- Neal, P. (2013) Rethinking Parks: Exploring New Business Models for Parks in the 21st Century, London: Nesta, Available at:
http://www.nesta.org.uk/sites/default/files/rethinking_parks.pdf (accessed 24.02.2014)
- O'Neill, J (1992) The Varieties of Intrinsic Value, *The Monist* 75(2):119-137
- ONS (Office of National Statistics) (2011a) Lead View Table – Tenure, 2011 (KS402EW) – Cross Gates and Whinmoor Ward -
<http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=7&b=6501235&c=LS15+8HP&d=14&e=62&g=6373073&i=1001x1003x1032x1004&m=0&r=0&s=1393434593873&enc=1&dsFamilyId=2482> (accessed 26.02.2014)
- ONS (Office of National Statistics) (2011b) Lead View Table – Tenure, 2011 (KS402EW) – Killingbeck and Seacroft Ward -
<http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=7&b=6503215&c=killingbeck+and+seacroft&d=14&e=62&g=6372715&i=1001x1003x1032x1004&m=0&r=1&s=1393434826420&enc=1&dsFamilyId=2482> (accessed 26.02.2014)
- ONS (Office of National Statistics) (2011c) Lead View Table – Tenure, 2011 (KS402EW) – Temple Newsam Ward -
<http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=7&b=6506506&c=temple+newsam&d=14&e=62&g=6372723&i=1001x1003x1032x1004&m=0&r=1&s=1393434859498&enc=1&dsFamilyId=2482> (accessed 26.02.2014)

- ONS (Office of National Statistics) (2011d) Lead View Table – Tenure, 2011 (KS402EW) –Pudsey Ward -
<http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=7&b=6505120&c=pudsey&d=14&e=62&g=6372657&i=1001x1003x1032x1004&m=0&r=1&s=1393434795873&enc=1&dsFamilyId=2482> (accessed 26.02.2014)

- ONS (Office of National Statistics) (2011e) Lead View Table – Sex, 2011 (QS104EW) – Cross Gates and Whinmoor Ward -
<http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=7&b=6501235&c=LS15+8HP&d=14&e=61&g=6373073&i=1001x1003x1032x1004&m=0&r=0&s=1393434530639&enc=1&dsFamilyId=2493> (accessed 26.02.2014)
- ONS (Office of National Statistics) (2011f) Lead View Table – Sex, 2011 (QS104EW) – Killingbeck and Seacroft Ward -
<http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=7&b=6503215&c=killingbeck+and+seacroft&d=14&e=61&g=6372715&i=1001x1003x1032x1004&m=0&r=1&s=1393434405733&enc=1&dsFamilyId=2493> (accessed 26.02.2014)
- ONS (Office of National Statistics) (2011g) Lead View Table – Sex, 2011 (QS104EW) – Temple Newsam Ward -
<http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=7&b=6506506&c=temple+newsam&d=14&e=61&g=6372723&i=1001x1003x1032x1004&m=0&r=1&s=1393434315858&enc=1&dsFamilyId=2493> (accessed 26.02.2014)
- ONS (Office of National Statistics) (2011h) Lead View Table – Age by Single Year, 2011 (QS103EW) -Cross Gates and Whinmoor Ward -
<http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=7&b=6501235&c=LS15+8HP&d=14&e=61&g=6373073&i=1001x1003x1032x1004&m=0&r=0&s=1393434530639&enc=1&dsFamilyId=2545> (accessed 26.02.2014)
- ONS (Office of National Statistics) (2011i) – Lead View Table – Age by Single Year, 2011 (QS103EW) - Killingbeck and Seacroft Ward -
<http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=7&b=6503215&c=killingbeck+and+seacroft&d=14&e=61&g=6372715&i=1001x1003x1032x1004&m=0&r=1&s=1393434405717&enc=1&dsFamilyId=2545> (accessed 26.02.2014)
- ONS (Office of National Statistics) (2011j) – Lead View Table – Age by Single Year, 2011 (QS103EW) - Temple Newsam Ward -
<http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=7&b=6506506&c=temple+newsam&d=14&e=61&g=6372723&i=1001x1003x1032x1004&m=0&r=1&s=1393434315842&enc=1&dsFamilyId=2545> (accessed 26.02.2014)
- ONS (Office of National Statistics) (2011k) Lead View Table – Sex, 2011 (QS104EW) – Pudsey Ward -
<http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=7&b=6505120&c=pudsey&d=14&e=61&g=6372657&i=1001x1003x1032x1004&m=0&r=1&s=1393433583799&enc=1&dsFamilyId=2493> (accessed 26.02.2014)
- ONS (Office of National Statistics) (2011l) - Lead View Table – Age by Single Year, 2011 (QS103EW) – Pudsey Ward -
<http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=7&b=6505120&c=pudsey&d=14&e=61&g=6372657&i=1001x1003x1032x1004&m=0&r=1&s=1393433583784&enc=1&dsFamilyId=2545> (accessed 26.02.2014)

- ONS (Office of National Statistics) (2011m) - Lead View Table – Ethnic Group, 2011 (KS201EW) –Cross Gates and Whinmoor Ward -
<http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=7&b=6501235&c=LS15+8HP&d=14&e=62&g=6373073&i=1001x1003x1032x1004&m=0&r=0&s=1393434593873&enc=1&dsFamilyId=2477> (accessed 26.02.2014)
- ONS (Office of National Statistics) (2011n) - Lead View Table – Ethnic Group, 2011 (KS201EW) –Killingbeck and Seacroft -
<http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=7&b=6503215&c=killingbeck+and+seacroft&d=14&e=62&g=6372715&i=1001x1003x1032x1004&m=0&r=1&s=1393434465139&enc=1&dsFamilyId=2477> (accessed 26.02.2014)
- ONS (Office of National Statistics) (2011o) - Lead View Table – Ethnic Group, 2011 (KS201EW) –Temple Newsam Ward -
<http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=7&b=6506506&c=temple+newsam&d=14&e=62&g=6372723&i=1001x1003x1032x1004&m=0&r=1&s=1393434375186&enc=1&dsFamilyId=2477> (accessed 26.02.2014)
- ONS (Office of National Statistics) (2011p) Lead View Table – Ethnic Group, 2011 (KS201EW) –Pudsey Ward -
<http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=7&b=6505120&c=pudsey&d=14&e=62&g=6372657&i=1001x1003x1032x1004&m=0&r=1&s=1393434265639&enc=1&dsFamilyId=2477> (accessed 26.02.2014)
- Özgüner, H. and Kendle, A.D. (2006) Public attitudes towards naturalistic versus designed landscapes in the city of Sheffield (UK), *Landscape and Urban Planning* 74 (2): 139-157
- Pain, R. (2000) Place, social relations and the fear of crime: a review, *Progress in Human Geography* 24(3): 365-387
- Parfitt, J. (2005) Questionnaire design and sampling, In: Flowerdew, R. and Martin, D. (2005) *Methods in Human Geography: A guide for students doing a research project*, 2nd edition, Harlow: Pearson Education
- Peace, R. and van Hoven, B. (2010) Computers, Qualitative Data, and Geographic Research, In: Hay, I (ed.) *Qualitative Research Methods in Human Geography*, Third Edition Oxford: Oxford University Press
- Pearce, D. (1993) Economic values and the natural world, London: Earthscan
- Penning-Rowsell, A. (2006) Public space, public value, Paper presented at WALK21-VII, “The Next Steps”, The 7th International Conference on Walking and Liveable Communities, October 23-25 2006, Melbourne, Australia
- Peters, K. Elans, B. and Buijs, A. (2010) Social interactions in urban parks: Stimulating social cohesion? *Urban Forestry & Urban Greening* 9(2): 93-100

- Philip, L.J. (1998) Combining quantitative and qualitative approaches to social research in human geography – an impossible mixture?, *Environment and Planning A* 30: 261-276
- Poundstone W. (2010) Priceless: The Psychology of Value, Oxford: Oneworld Publications
- Prezza, M., Amici, M., Roberti, T. and Tedeschi, G. (2001) Sense of Community Referred to the Whole Town: Its Relations with Neighboring, Loneliness, Life Satisfaction, and Area of Residence, *Journal of Community Psychology* 29(1): 29-52
- Reed, P.B. and Selbee, L.K. (2001) The Civic Core in Canada: Disproportionality in Charitable Giving, Volunteering and Civic Participation, *Nonprofit and Voluntary Sector Quarterly* 30(4): 761-780
- Rishbeth, C. and Finney, N. (2006) Novelty and Nostalgia in Urban Greenspace: Refugee Perspectives, *Tijdschrift voor Economische en Sociale Geografie* 97(3): 281-295
- Robson, C. (2002) *Real World Research* 2nd Edition Blackwell Oxford
- Rose, G. (1997) Situating Knowledges: positionality, reflexivity and other tactics, *Progress in Human Geography* 21 (3): 305-320
- Rowles, G.D. (1983) Place and Personal Identity in Old Age: Observations from Appalachia, *Journal of Environmental Psychology* 3: 299-313
- Sale, J.E.M., Lohfield, L.H. and Brazil, K. (2002) Revisiting the Quantitative-Qualitative Debate: Implications for Mixed-Methods Research, *Quality & Quantity* 36: 43-53
- Sanesi, G., Laforteza, R., Bonnes, M. and Carrus, G. (2006) Comparison of two different approaches for assessing psychological and social dimensions of green space, *Urban Forestry and Urban Greening* 5: 121-129
- Saxon, R. (2005) Be valuable: A guide to creating value in the built environment, London: Constructing Excellence, Available at: <http://www.saxoncbe.com/be-valuable.pdf> (accessed 15.11.2013)
- Sayer, A. (1992) Method in social science: a realist approach, 2nd edition, London:Routledge
- Scannell, L. and Gifford, R. (2010) Defining place attachment: A tripartite organizing framework, *Journal of Environmental Psychology* 30: 1-10
- Schipperijn, J., Ekholm, O., Stigsdotter, U.K., Toftager, M., Bentsen, P., Kamper-Jørgensen, F. and Randrup, T.B. (2010) Factors influencing the use of green space: Results from a Danish national representative survey, *Landscape and Urban Planning* 95(3): 130-137
- Schipperijn, J., Stigsdotter, U.K., Randrup, T.B. and Troelsen, J. (2010) Influences on the use of urban green space – A case study in Odense, Denmark, *Urban Forestry and Urban Greening* 9: 25-32

- Seeland, K., Dübendorfer, S. and Hansmann, R. (2009) Making friends in Zurich's urban forests and parks: The role of public green space for social inclusion of youths from different cultures, *Forest Policy & Economics* 11: 10-17
- Skjaeveland, O. and Garling, T. (1997) Effects of Interactional Space on Neighbouring, *Journal of Environmental Psychology* 17: 181-198
- Smaldone, D. (2006) The Role of Time in Place Attachment, Proceedings of the 2006 Northeastern Recreation Research Symposium
- Smith, S.J. (2009) Pragmatism/Pragmatist Geographies, In: Kitchin, R. and Thrift, N. (2009) *International Encyclopedia of Human Geography*, Elsevier, ebook
- Solecki, W.D., & Welch, J.M. (1995) Urban parks: green spaces or green walls? *Landscape and Urban Planning* 32: 93-106
- Staeheli, L.A. (2010) Political geography: democracy and the disorderly public, *Progress in Human Geography* 34:67-78
- Stigsdotter, U.K., Ekholm, O., Schipperijn, J., Toftager, M., Kamper-Jørgensen and Randrup, T.B. (2010) Health promoting outdoor environments – Associations between green space, and health, health-related quality of life and stress based on a Danish national representative survey, *Scandinavian Journal of Public Health* 38: 411-417
- Strauss, A.L. and Corbin, J. (1998) Basic of Qualitative Research: Techniques and Procedures for Developing Grounded Theory, 2nd Edition, Thousand Oaks, California: SAGE
- Sugiyama, T., Leslie, E., Giles-Corti, B. and Owen, N. (2008) Associations of neighbourhood greenness with physical and mental health: do walking, social coherence and local social interaction explain the relationships?, *Journal of Epidemiology and Community Health* 62: 1-6
- Sui, D. and DeLyser, D. (2011) Crossing the quantitative-qualitative chasm I: Hybrid geographies, the spatial turn, and volunteered geographic information (VGI), *Progress in Human Geography* 36 (1):111-124
- Sullivan, W.C., Kuo, F.E. and Depooter, S.F. (2004) The Fruit of Urban Nature: Vital Neighbourhood Spaces, *Environment and Behaviour* 36: 678-700
- Swanborn, P. G.(2010) Case Study Research: why, what and how? London: SAGE
- Swanwick, C., Dunnett, N. and Woolley, H. (2003) Nature, Role and Value of Green Space in Towns and Cities: An Overview, *Built Environment* 29 (2): 94-106
- Tashakkori, A. and Creswell, J.W. (2008)Editorial: Mixed Methodology Across Disciplines, *Journal of Mixed Methods Research* 2(1): 3-6
- Teddlie, C. and Tashakkori, A. (2009) Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioural Sciences, Thousand Oaks, California: SAGE

- Teddlie, C. and Tashakkori, A. (2011) Mixed Methods Research: Contemporary Issues in an Emerging Field, In: Denzin, N.K. and Lincoln, Y.S. (eds.) (2011) *The SAGE Handbook of Qualitative Research*, Thousand Oaks, California: SAGE
- Tibbatts, D. (2002) Your Parks: The benefits of parks and urban green space, Urban Parks Forum. Available at: <http://www.green-space.org.uk/downloads/ArchivedPublications/YourParks.pdf> (accessed 15.11.2013)
- Tuan, Y-F. (1977) Space and place: The perspective of experience, Minnesota: The University of Minnesota Press
- Tversky, A. and Kahneman, D. (1974) Judgement under Uncertainty: Heuristics and Biases, *Science New Series* 185 (4157): 1124-1131
- Tyrväinen, L. (1997) The amenity value of the urban forest: an application of the hedonic pricing method, *Landscape and Urban Planning* 37 (3-4):211-222
- Tyrväinen, L. (2001) Economic valuation of urban forest benefits in Finland, *Journal of Environmental Management* 62 (1): 75-92
- Tyrväinen, L. and Vääänen, H. (1998) The economic value of urban forest amenities: an application of the contingent valuation method, *Landscape and Urban Planning* 43: 105-118
- Ulrich, R.S. (1984) View Through a Window May Influence Recovery from Surgery, *Science* 224:420-421
- Valentine, G. (2005) Tell me about...: using interviews as a research methodology, In: Flowerdew, R. and Martin, D. (2005) *Methods in Human Geography: A guide for students doing a research project*, 2nd Edition, Harlow, Essex: Pearson
- Van den Berg, A.E., Hartig, T. and Staats, H. (2007) Preference for nature in urbanised societies: stress, restoration, and the pursuit of sustainability, *Journal of Social Issues* 63(1): 79-96
- Van Hoven, B. and Poelman, A.C. (2003) Using Computers for Qualitative Data Analysis: An example using NUD.IST, *Journal of Geography in Higher Education* 27(1): 113-120
- Völker, B., Flap, H. and Lindenberg, S. (2007) When are Neighbourhoods Communities? Community in Dutch Neighbourhoods, *European Sociological Review* 23(1):99-114
- Ward Thompson, C. (2002) Urban open space in the 21st century, *Landscape and Urban Planning* 60: 59-72
- Ward Thompson, C., Aspinall, P. and Bell, S. (eds.) (2010) Innovative Approaches to Researching Landscape and Health: Open Space: People Space 2, Routledge: Abingdon, UK

- Ward Thompson, C, Aspinall, P and Montarzino, A. (2008). The Childhood Factor: Adult Visits to Green Places and the Significance of Childhood Experience, *Environment and Behaviour* 40 (1): 111-143
- Warde, A., Tampubolon, G. and Savage, M. (2005) Recreation, informal social networks and social capital, *Journal of Leisure Research*, Autumn 2005.
- Wellman, B. (2001) Computer Networks As Social Networks, *Science* 293: 2031-2034
- Wilson, E.O. (1984) Biophilia, Cambridge, M.A.: Harvard University Press
- Wilson, O. and Hughes, O. (2011) Urban Green Space Policy and Discourse in England under New Labour from 1997 to 2010, *Planning Practice and Research* 26(2):207-228
- Worpole, K. and Knox, K. (2007) The social value of public spaces, Joseph Rowntree Foundation, www.jrf.org.uk/publications/social-value-public-spaces (accessed 14.09.2010)
- Yeung, H.W (1997) Critical realism and realist research in human geography: a method or a philosophy in search of a method?, *Progress in Human Geography* 21 (1): 51-74
- Yin, R. K. (2006) Mixed Methods Research: Are the Methods Genuinely Integrated or Merely Parallel? *Research in Schools* 13(1): 41-47